City of Newport Beach Local Coastal Program



Coastal Land Use Plan

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CITY OF NEWPORT BEACH

Local Coastal Program Coastal Land Use Plan



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> City of Newport Beach Newport Beach, California

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Table of Contents

CHAPTER 1	- INTRODUCTION	
1.1 1.2 1.3 1.4 1.5	Purpose Organization General Policies The Coastal Act The City of Newport Beach	1-1 1-1 1-2 1-2 1-4
CHAPTER 2	- LAND USE AND DEVELOPMENT	
2.1	Land Use 2.1.1 Land Use Categories 2.1.2 District/Corridor Policies 2.1.3 West Newport 2.1.4 Mariners' Mile 2.1.5 Balboa Peninsula 2.1.6 Balboa Island 2.1.7 Newport Dunes 2.1.8 Balboa Bay Tennis Club 2.1.9 Coastal Land Use Map	2-1 2-6 2-7 2-9 2-11 2-17 2-18 2-18
2.2	General Development Policies 2.2.1 Location of New Development 2.2.2 Coastal Development Review 2.2.3 Exclusion Areas 2.2.4 Deferred Certification Areas 2.2.5 Nonconforming Structures and Uses	2-20 2-21 2-23 2-25 2-26
2.3	Visitor-serving and Recreational Development 2.3.1 Commercial 2.3.2 Open Space and Tidelands/Submerged Lands 2.3.3 Lower Cost Visitor and Recreational Facilities	2-28 2-32 2-34
2.4	Coastal-dependent/related Development 2.4.1 Commercial 2.4.2 Public Facilities	2-38 2-40
2.5	Tidelands and Submerged Lands 2.5.1 The Tidelands Trust 2.5.2 Tidelands Leases	2-41 2-41
2.6	Industrial Development	2-41 2-45
2.0	·	2-43 2- 4 7

Table of Contents (Continued)

2.8	Hazards and Protective Devices	
	2.8.1 General	2-49
	2.8.2 Tsunamis and Rogue Waves	2-50
	2.8.3 Storm Surges and Seiches	2-53
	2.8.4 Hurricanes and Tropical Storms	2-56
	2.8.5 Sea Level Rise	2-57
	2.8.6 Coastal Erosion	2-58
	2.8.7 Geologic and Seismic	2-64
	2.8.8 Fire	2-68
2.9	Transportation	
	2.9.1 Public Transit	2-71
	2.9.2 Bikeways and Trails	2-73
	2.9.3 Parking	2-74
CHADTED 2	– PUBLIC ACCESS AND RECREATION	
CHAPTER 3	- FUBLIC ACCESS AND RECREATION	
3.1	Shoreline and Bluff Top Access	0.1
	3.1.1 Shoreline Access	3-1
	3.1.2 Bluff Top Access	3-11
	3.1.3 Beach Encroachments	3-13
	3.1.4 Bay/Harbor Encroachments	3-16
	3.1.5 Private/Gated Communities	3-17
	3.1.6 Preferential Parking Districts	3-20
	3.1.7 Temporary Events	3-21
	3.1.8 Temporary Closures	3-23
3.2	Recreation and Support Facilities	
	3.2.1 Recreational Opportunities	3-24
	3.2.2 Support Facilities and Services	3-26
	3.2.3 Access for Persons with Disabilities	3-31
3.3	Vessel Launching, Berthing, and Storage	
	3.3.1 Vessel Launching	3-33
	3.3.2 Berthing and Storage	3-34
	3.3.3 Harbor Support Facilities	3-36
CHAPTER 4	- COASTAL RESOURCE PROTECTION	
4.1	Riological Posourcos	
4.1	Biological Resources	<i>A</i> 1
	4.1.1 Environmentally Sensitive Habitats	4-1
	4.1.2 Marine Resources	4-9

Table of Contents (Continued)

	4.1.3 Environmental Study Areas	4-14
	No. 1 Semeniuk Slough	4-15
	No. 2 North Star Beach	4-17
	No. 3 West Bay	4-18
	No. 4 Upper Newport Bay Marine Park/DeAnza	4-19
	No. 5 San Diego Creek	4-21
	No. 6 Eastbluff Remnant	4-23
	No. 7 Mouth of Big Canyon	4-24
	No. 8 Newporter North	4-25
	No. 9 Buck Gully	4-26
	No. 10 Morning Canyon	4-28
	No. 11 Newport Beach Marine Conservation Area	4-30
	No. 12 Castaways	4-31
	No. 13 Newport Harbor Entrance Kelp Beds	4-33
	4.1.4 Eelgrass Meadows	4-40
	4.1.5 Coastal Foredunes	4-42
4.2	Wetlands and Deepwater Areas	
	4.2.1 Southern California Wetlands	4-44
	4.2.2 Wetland Definition and Delineation	4-46
	4.2.3 Dredging, Diking, and Filling	4-48
	4.2.4 Dredge Spoils Disposal	4-57
	4.2.5 Eelgrass Protection and Restoration	4-59
4.3	Water Quality	
	4.3.1 TMDLs	4-62
	4.3.2 NPDES	4-65
	4.3.3 SSOs	4-69
4.4	Scenic and Visual Resources	
	4.4.1 Coastal Views	4-71
	4.4.2 Bulk and Height Limitation	4-74
	4.4.3 Natural Landform Protection	4-76
	4.4.4 Signs and Utilities	4-83
4.5	Paleontological and Cultural Resources	
	4.5.1 Paleontological and Archaeological Resources	4-84
	4.5.2 Historical Resources	4-86
4.6	Environmental Review	4-89
CHAPTER 5	- GLOSSARY	
	Clossany	<i>E</i> 1
	Glossary	5-1

List of Maps

CHAPTER 2 -	- LAND USE AND DEVELOPMENT		
Map 1: Map 2:	Coastal Land Use Plan Bikeways and Trails		
CHAPTER 3 -	- PUBLIC ACCESS AND RECREATION		
Map 3-1: Map 3-2: Map 3-3: Map 3-4:	Map 3-2: Support Facilities Map 3-3: Parks		
CHAPTER 4 -	- COASTAL RESOURCE PROTECTION		
Map 4-1: Map 4-2: Map 4-3: Map 4-4:	Environmental Study Areas Marine Resources Coastal Views (3 maps) Historical Resources	4-92 4-93 4-94 4-97	
	List of Figures		
CHAPTER 2 -	- LAND USE AND DEVELOPMENT		
Figure 2.1.3- Figure 2.1.5- Figure 2.1.5- Figure 2.1.5- Figure 2.1.6- Figure 2.1.7- Figure 2.1.8-	 Mariner's Mile Lido Village / Cannery/ Lido Peninsula / McFadden 15th Street Balboa Village Balboa Island Commercial Newport Dunes 	2-82 2-83 2-84 2-85 2-86 2-87 2-88 2-89	

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1.0 Introduction

1.1 Purpose

This document establishes the Coastal Land Use Plan of the Local Coastal Program of the City of Newport Beach, prepared in accordance with the California Coastal Act of 1976. The Coastal Land Use Plan sets forth goals, objectives, and policies that govern the use of land and water in the coastal zone within the City of Newport Beach and its sphere of influence, with the exception of Newport Coast and Banning Ranch. The physical boundaries of the area to which the Coastal Land Use Plan applies are shown on the Coastal Land Use Map, included as Map 1. Newport Coast is governed by the previously certified and currently effective Newport Coast segment of the Orange County Local Coastal Program. Banning Ranch is a Deferred Certification Area (DCA) due to unresolved issues relating to land use, public access and the protection of coastal resources (see Section 2.2.4).

1.2 Organization

The Coastal Act contains coastal resources planning and management policies that address public access, recreation, marine environment, land resources, development, and industrial development. The Coastal Land Use Plan addresses these topics under the following chapters:

Land Use and Development. This chapter includes policies for topics in Sections 30007, 30212.5, 30213, 30221-30223, 30235-30236, 30250, 30252-30253, 30255, 30260, 30262, 30600, 30610.5 of the Coastal Act.

Public Access and Recreation. This chapter includes policies for topics in Sections 30210-30214, 30220-30224, 30234, 30234.5, 30244, and 30252 of the Coastal Act.

Coastal Resource Protection. This chapter includes policies for topics covered in Sections 30230-30233, 30240, 30244, and 30251 of the Coastal Act.

Each chapter is divided into sections and subsections. Each section or subsection begins with the identification of the Coastal Act sections that are relevant to Newport Beach, followed by a narrative of the local setting and policy direction adopted by the City to address the requirements of the Coastal Act and a listing of specific policies.

1.3 General Policies

The following policies shall be applied to achieve the goals and objectives of the Coastal Act in applying the policies of this Coastal Land Use Plan:

- 1. The policies of Chapter 3 of the Coastal Act (PRC Sections 30200 30265.5) shall be the guiding policies of the Coastal Land Use Plan.
- Where there are conflicts between the policies set forth in this Coastal Land Use Plan and those set forth in any element of the City's General Plan, zoning, or any other ordinance, the policies of the Coastal Land Use Plan shall take precedence. However, in no case, shall the policies of the Coastal Land Use Plan be interpreted to allow a development to exceed a development limit established by the General Plan or its implementing ordinances.
- 3. In the event of any ambiguities or silence in this Coastal Land Use Plan not resolved by (1) or (2) above, or by other provisions of the City's LCP, the Chapter 3 policies of the Coastal Act shall guide interpretation of this Coastal Land Use Plan.
- 4. This Coastal Land Use Plan is not intended, and shall not be construed, as authorizing the Coastal Commission or City to exercise its power to grant or deny a permit in a manner that will take or damage private property for public use, without the payment of just compensation therefor. This Section is not intended to increase or decrease the rights of any owner of property under the Constitution of the State of California or the United States.
- 5. No provision of the Coastal Land Use Plan or the Coastal Act is a limitation on any of the following:
 - A. On the power of the City to declare, prohibit, and abate nuisances.
 - B. Except as otherwise limited by state law, on the power of the City to adopt and enforce additional regulations, not in conflict with the Coastal Land Use Plan or the Coastal Act, imposing further conditions, restrictions, or limitations with respect to any land or water use or other activity which might adversely affect the resources of the coastal zone.

1.4 The Coastal Act

In 1972, the United States Congress passed the Coastal Zone Management Act (Title 16 U.S.C. 1451-1464). The CZMA declared a national policy "to preserve, protect, develop, and where possible, to restore or enhance, the resources of the

Nation's coastal zone for this and succeeding generations." The CZMA sought to encourage and assist States to develop and implement management programs for the use of coastal land and water resources, "giving full consideration to ecological, cultural, historic, and esthetic values as well as the needs for compatible economic development."

The Coastal Zone Conservation Act (Proposition 20) was approved by a 55.2 percent vote in 1972. It prohibited development 1,000 yards inland from California's mean high tide without a permit from a regional or state coastal commission. It created a temporary California Coastal Zone Conservation Commission and six regional commissions to develop a statewide plan for coastal protection. The California Coastal Plan was submitted to the Legislature in 1975 and led to the passage of the California Coastal Act in 1976.

The Coastal Act established the permanent California Coastal Commission. The Coastal Commission's mandate is to protect and enhance the resources of the coastal zone mapped by the Legislature. Commission Coastal membership is composed of voting twelve members. equally appointed by Governor, the Senate Rules Committee, and the Speaker of the Assembly. Half of the voting commissioners are locally elected officials and half are representatives of the public at large. The Coastal Commission also has four ex officio (nonvoting) members representing the Resources Agency, the

Coastal Act Goals for the Coastal Zone

- a) Protect, maintain and, where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.
- Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state.
- c) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.
- Assure priority for coastal-dependent and coastal-related development over other development on the coast.
- e) Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone.

Public Resources Code Section 30001.5

Business, Transportation and Housing Agency, the Trade and Commerce Agency and the State Lands Commission.

The Legislature found that "to achieve maximum responsiveness to local conditions, accountability, and public accessibility, it is necessary to rely heavily on local government and local land use planning procedures and enforcement." Therefore, implementation of Coastal Act policies is accomplished primarily through the preparation of a Local Coastal Program (LCP), reviewed and approved by the Coastal Commission. An LCP typically consists of a land use plan and an implementation plan. The land use plan indicates the kinds, location, and intensity of

land uses, the applicable resource protection and development policies, and, where necessary, a listing of implementing actions. The implementation plan consists of the zoning ordinances, zoning district maps, and other legal instruments necessary to implement the land use plan. Any amendments to the certified LCP will require review and approval by the Coastal Commission prior to becoming effective.

After certification of an LCP, coastal development permit authority is delegated to the appropriate local government. The Coastal Commission retains original permit jurisdiction over certain specified lands, such as submerged lands, tidelands, and public trust lands, and has appellate authority over development approved by local government in specified geographic areas and for major public works projects and major energy facilities. In authorizing coastal development permits, the local government must make the finding that the development conforms to the certified LCP. Furthermore, after certification of the LCP, City actions on applications for Coastal Act authority to conduct certain types of development and development within certain geographic areas are appealable, to the Coastal Commission.

1.5 The City of Newport Beach

History

In order to fully understand the relationship between the Coastal Land Use Plan and the community, it is necessary to understand the community and the historical events that have influenced it. The history of Newport Beach begins with the bay. It is the story of how natural forces shaped the land and coast and how people responded to these changes.

It is believed that Newport Bay formed about 300,000 years ago when a precursor of the Santa Ana River flowed into the northern end of the bay and carved a deep canyon. Rising sea levels submerged the bay until about 15,000 to 25,000 years ago. When the bay reemerged, the Santa Ana River, as it did throughout its history, had shifted across the coastal plain and now flowed into the ocean at Alamitos Bay.



Tongva millingstone

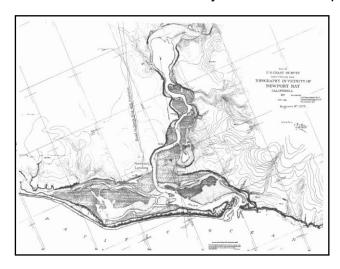
10,000 to 12,000 years ago, aboriginal hunters and gatherers were first drawn

to this area by the rich bounty of the bay and ocean. These original inhabitants supplemented their diet with a variety of meat from marine resources, including shellfish, fish, and birds and probably ventured out into the ocean in rafts to fish for

Sheepshead, Blacksmith, and Giant Kelpfish. The most recent native people were the Tongva (Gabrielinos) and the Acjachemem (Juanenos), who lived in small villages around the bay until the beginning of the Mission period in the 1770's.

During the Mission period, the hills above the bay were part of a vast open cattle range of the Mission San Juan Capistrano. Early Spanish names for the bay were *Bolsa de Quigara* (bay with high banks) or *Bolsa de Gengara*, in reference to a nearby Indian village. After Mexico gained independence from Spain in 1831, the mission lands were broken up and redistributed through land grants. In 1837, the bay became a part of Rancho San Joaquin under the ownership of Jose Andres Sepulveda. Floods and droughts caused Sepulveda to sell the ranch in 1864 and it eventually became a part of the expansive Irvine Ranch.

The bay at that time was open to the ocean and part of a large estuary that stretched from Huntington Beach to Corona del Mar. In 1825, unusually heavy floods again shifted the mouth of the Santa Ana River to the southeast of the Huntington Beach mesa. Sand carried by the river began to form a peninsula. Over the next thirty years, the peninsula made steady progress in a southeasterly direction. By 1857, the eastern tip had reached to approximately where Bay Island is today. Floods during the winter of 1861-62 extended the peninsula to the present harbor entrance. This barrier beach forced the Santa Ana River to flow parallel to the coast. The accretion of silt made the bay shallower and spread marsh vegetation.



1875 survey map of Newport Bay

In the late 1860's, the bay was used as a landing to load hides, tallow, hay and other goods for export. September 1870, Captain Samuel S. Dunnells' steamer Vaguero ventured into the bay to offload a cargo of Captain lumber and shingles. Dunnells soon established "Newport Landing" by constructing a small wharf and warehouse near the west end οf the present Coast Highway/Newport Bay Bridge. James McFadden and his younger brother Robert acquired the landing in 1875 and for the next nineteen years operated a thriving commercial trade

and shipping business. However, the bay was not yet a true harbor and sand bars and a treacherous bay entrance caused the McFadden Brothers to move the shipping business to the oceanfront by constructing a large pier on the sand spit that would become the Balboa Peninsula. The site was ideal because a submarine canyon (Newport Submarine Canyon), carved along with Newport Bay by the ancient Santa Ana River, provided calm waters close to the shore. McFadden Wharf was

completed in 1888 and was connected by rail to Santa Ana in 1891. For the next eight years, the McFadden Wharf area was a booming commercial and shipping center and a company town began to grow. However, in 1899, the Federal Government allocated funds for major improvements to a new harbor at San Pedro, which would become Southern California's major seaport. The McFadden Wharf and railroad was sold to the Southern Pacific Railroad that same year, signaling the end of Newport Bay as a commercial shipping center.

In 1902, James McFadden sold his Newport townsite and about half of the Peninsula to William S. Collins, who saw Newport Bay's resort and recreation potential. Collins took on Henry E. Huntington as a partner in the Newport Beach Company. Huntington had acquired the Pacific Electric railway system and used it to promote new communities outside of Los Angeles. In 1905, the Pacific Electric "Red Cars" were extended to Newport and then to Balboa the following year. Also in 1906, Collins began dredging a channel on the north side of the bay and deposited the sand and silt on tidelands that would become Balboa Island. Between 1902 and 1907, many of Newport Beaches' waterfront communities were subdivided, including West Newport, East Newport, Bay Island, Balboa, and Balboa Island. This established the grid system of small lots and narrow streets and alleys that still exists today in these areas.

In 1906, the City of Newport Beach, consisting of West Newport and Balboa Peninsula, incorporated. In 1916, most of Balboa Island was annexed, followed by Newport Heights in 1917, Corona del Mar in 1924, and the balance of Balboa Island in 1927. In 1923, the dredging and filling of mud flats that would become Lido Island began. At this time, Newport Beach was still a beach town, with most of the homes being constructed as beach cottages and second homes used for vacations. However, public safety concerns would move Newport Beach to embark on a series of projects to protect and improve the harbor and ultimately lead to the next stage in the City's development.



Newport Beach circa 1910

At that time, the channels in the bay were narrow, shallow, and tortuous. Two massive floods in December 1914 and January 1916 filled the harbor and beaches with silt and debris. This and an increasing number of drownings at the harbor entrance prompted Newport Beach voters to approve funds to build the west jetty. In 1919, Orange County voted for funds to extend the jetty and build a dam to divert the Santa Ana River from the bay and flow directly into the ocean west of the City. The harbor improvements turned a small colony of fishermen into a major industry. In

the 1920's the sport fishing and commercial fishing would become the major source of income in Newport Beach. In 1921, the first of four commercial fish canneries was built on the Rhine Channel. The boatyard industry also began to flourish.

The great increase in the number of commercial and recreational boats in the 1920s led to calls for further harbor improvements. Also, the consensus gradually changed from development of a commercial harbor to a recreational harbor. In 1928, Newport Beach voters approved funds for work on the west and east jetties. In 1933, a federal grant and matching funds from an Orange County bond measure provided funds to extend the jetties and dredge the entire Lower Newport Bay. On May 23, 1936, Newport Harbor was dedicated. The completion of the harbor improvements increased recreational and commercial boating activity. The South Coast Shipyard produced all types of pleasure craft. With the United States entry into World War II, the boatyards quickly shifted to the wartime production. South Coast and the new Lido Shipyard produced minesweepers, sub chasers, and other military vessels. By the end of the war, the summer beach resort town had become a city of 10,000 people.

The postwar boom in Southern California led to the next stage in the City's development. The Irvine Company began to open some of its vast land holdings east of the City to residential development. During the 1950's the City annexed over 4,382 acres, more than tripling its land area. In 1960, the City had a population of 26,565 people. The 1960's saw the development of major employment, commercial, and educational centers in Orange County. The City annexed another 2,280 acres, including the Newport Dunes and the future sites of Newport Center and Fashion Island. In 1970, the City's population had reached 49,442 people.

The expansion and development of the City led to a period of introspection in the 1970's. In 1969, a citizens committee completed work on a set of community goals titled *Newport Tomorrow*, which served as the basis for the City's 1973 General Plan. *Newport Tomorrow* also served as a catalyst for a series of special studies, which resulted in new development controls.

In 1970, the Lower Newport Bay Civic District study began to analyze development around the lower bay, including height limits, the preservation of marine service facilities, public access, and view corridors. The study resulted in the adoption of the Shoreline Height Limitation Ordinance in 1972, which established new height and bulk restrictions around the bay. Height limits along Pacific Coast Highway and other commercial areas were lowered from 85 to 26 feet. Residential development standards for Corona del Mar, Balboa Island, West Newport, and the Balboa Peninsula followed in 1973 and 1974, which set stricter floor area and height limits and higher off-street parking and open space requirements.



Upper Newport Bay circa 1952

land exchange proposed between the County of Orange and the Irvine Company cleared the way for the development of the Upper Newport Bay with residential uses and marinas in the early 1960's. Newport Beach residents began movement to preserve the Upper Bay, first winning local government support, then at the County, then at the State. 1973, an appellate court ruled that a proposed land exchange was unconstitutional. In 1974, a committee composed of Federal.

State, and local agencies and interested members of the community produced a plan that recommended preservation of the Upper Bay. The Upper Newport Bay Ecological Reserve (Upper Newport Bay Marine Park) was created in 1975 as result of the purchase of 527 acres of land in and around the bay from the Irvine Company and the transfer of 214 acres of tidal wetlands from the County of Orange to the State.

The City continued to expand and develop in the 1980's and 1990's, albeit at a slower pace. The City's population was 65,283 in 1980, and increased to 66.643 in 1990. Land use and development policies continued to be refined. ln 1988, comprehensive amendments Land Use and to Circulation Elements of the General Plan were adopted to establish reasonable density and intensity limits, allow for modest growth, and to better correlate land uses with the circulation system. Specific plans were adopted for the older commercial districts on the Balboa Peninsula, including Cannery Village, McFadden Square, and Balboa Village. By the year 2000, the population had reached 70,032.

Coastal History Notes

	Coustai instory notes
1905	Balboa Pier and Balboa Pavilion constructed.
1909	Balboa Island Ferry service established.
1911	First yacht club established in Newport Beach.
1913	Frost Life Saving Corps organized.
1917	First commercial fish cannery opens.
1918	Newport to Balboa boardwalk constructed.
1922	Duke Kahanamoku introduces surfing at Newport.
1922	City purchases Newport Pier (McFadden Wharf).
1923	First public restrooms built at McFadden Place.
1923	First City lifeguard service created.
1934	Sea salt works dike constructed in Upper Bay.
1936	Fun Zone opens.
1948	First Newport-Ensenada Yacht Race.
1958	Newport Dunes opens.
1969	Floods breach salt works dikes, silts Upper Bay.
1971	Fun Zone saved from condominium development.
1982	Upper Newport Bay dredged to clear silt build-up.
1982	First LCP Land Use Plan certified.
2000	Upper Newport Bay Interpretative Center opens.

Newport Beach in 2004

At the beginning of the 21st Century, Newport Beach is a community of 75,662 people covering 25.4 square miles, including 2.5 square miles of bay and harbor waters. The City has over 30 miles of bay and ocean waterfront. Over 63 percent of the City is in the coastal zone.

While Newport Beach is no longer a sleepy little beach town, the bay and beach continue to play an important role in the community's character and economy. Newport Harbor is the largest small craft harbor in the United States with over 9,000 boats at 2,119 commercial slips and side ties, 1,221 bay moorings, and 1,230 piers. Beach attendance averages 9.4 million people annually.

Newport Beach continues to be a major visitor destination. In FY 2001, the City received 7.2 million visitors (people other than those who reside or work here). Over 80 percent of the City's visitors are here for purposes of leisure. The City has 16 hotel properties with 2,977 rooms and 535 seasonal housing units. However, the vast majority are day visitors.



Aerial view of the Balboa Peninsula

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2.0 Land Use and Development

2.1 Land Use

The Coastal Land Use Plan was derived from the Land Use Element of the General Plan and is intended to identify the distribution of land uses in the coastal zone. The Land Use Element may contain more precise development limits for specific properties. Should a conflict exist, the land use intensity or residential density limit that is most protective of coastal resources shall take precedence. However, in no case, shall the policies of the Coastal Land Use Plan be interpreted to allow a development to exceed a development limit established by the General Plan or its implementing ordinances.

2.1.1 Land Use Categories

Policy 2.1.1-1

The land use categories in Table 2.1.1-1 establish the type, density and intensity of land uses within the coastal zone. If there is a conflict between the development limits of the Land Use Element and the Coastal Land Use Plan, the provision that is most protective of coastal resources shall take precedence. However, in no case, shall the policies of the Coastal Land Use Plan be interpreted to allow a development to exceed a development limit established by the General Plan or its implementing ordinances.

Table 2.1.1-1 Land Use Plan Categories			
Land Use Category	Uses	Density/Intensity	
	Residential Neighborhoods		
Single Unit Residential			
Detached—RSD	The RSD category applies to a range of		
RSD-A	detached single-family residential dwelling units	0.0 – 5.9 DU/AC	
RSD-B	on a single legal lot and does not include	6.0 – 9.9 DU/AC	
RSD-C	condominiums or cooperative housing.	10.0 – 19.9 DU/AC	
RSD-D		20.0 – 29.9 DU/AC	
Single Unit Residential			
Attached—RSA	The RSA category applies to a range of		
RSA-A	attached single-family residential dwelling units	0.0 – 5.9 DU/AC	
RSA-B	on a single legal lot and does not include	6.0 – 9.9 DU/AC	
RSA-C	condominiums or cooperative housing.	10.0 – 19.9 DU/AC	
RSA-D		20.0 – 29.9 DU/AC	

Table 2.1.1-1 Land Use Plan Categories			
Land Use Category	Uses	Density/Intensity	
Two Unit		,	
Residential—RT			
RT-A	The RT category applies to a range of two	0.0 – 5.9 DU/AC	
RT-B	family residential dwelling units such as	6.0 – 9.9 DU/AC	
RT-C	duplexes and townhomes.	10.0 – 19.9 DU/AC	
RT-D		20.0 – 29.9 DU/AC	
RT-E		30.0 – 39.9 DU/AC	
Multiple Unit			
Residential—RM			
RM-A	The RM category is intended to provide	0.0 – 5.9 DU/AC	
RM-B	primarily for multi-family residential	6.0 – 9.9 DU/AC	
RM-C	development containing attached or detached	10.0 – 19.9 DU/AC	
RM-D	dwelling units.	20.0 – 29.9 DU/AC	
RM-E		30.0 – 39.9 DU/AC	
RM-F		40.0 – 52.0 DU/AC	
	Commercial Districts and Corridors		
Neighborhood Commercial—CN	The CN category is intended to provide for a limited range of retail and service uses developed in one or more distinct centers oriented to primarily serve the needs of and maintain compatibility with residential uses in the immediate area.	0.00 - 0.30 FAR	
Corridor Commercial—	The CC category is intended to provide a range		
CC-A	of neighborhood-serving retail and service uses along street frontages that are located and	0.00 – 0.50 FAR	
CC-B	designed to foster pedestrian activity.	0.00 – 0.30 FAR 0.00 – 0.75 FAR	
General Commercial—	·	0.00 - 0.731 AIX	
CG	The CG category is intended to provide for a		
CG-A	wide variety of commercial activities oriented	0.00 - 0.30 FAR	
CG-B	primarily to serve citywide or regional needs.	0.00 – 0.75 FAR	
Recreational and	The CM category is intended to provide for	5.55 577 577 17 17 17 17 17 17 17 17 17 17 17 17 1	
Marine Commercial—	commercial development on or near the bay in		
СМ	a manner that will encourage the continuation		
CM-A	of coastal-dependent and coastal-related uses,	0.00 - 0.30 FAR	
СМ-В	maintain the marine theme and character, encourage mutually supportive businesses, encourage visitor-serving and recreational uses, and encourage physical and visual access to the bay on waterfront commercial and industrial building sites on or near the bay.	0.00 – 0.50 FAR	

Table 2.1.1-1 Land Use Plan Categories			
Land Use Category	Uses	Density/Intensity	
Visitor Serving	The CV category is intended to provide for		
Commercial—CV	accommodations (e.g. hotels, motels, hostels),		
CV-A	goods, and services intended to primarily serve	0.00 – 0.75 FAR	
CV-B	visitors to the City of Newport Beach. Limited Use Overnight Visitor Accommodations (e.g. time shares, fractionals, condominium-hotels) (LUOVA) are an allowed use when provided together with traditional overnight, hotel visitor accommodations. Furthermore, any permitted LUOVA shall be subject to specific restrictions on the quantity, duration of owner use of such facilities, management of the accommodations as part of the hotel facility and an allowance for transient overnight use by the general public when not owner occupied. All of these requirements shall be further defined in the implementing regulations for this land use plan (when such regulations are certified) and through the coastal development permit process.	0.00 – 1.50 FAR	
General Commercial Office—COG	The COG category is intended to provide for		
COG-A	administrative, professional, and medical offices with limited accessory retail and service uses.	0.00 – 0.30 FAR	
COG-B	Hotels, motels, and convalescent hospitals are	0.00 – 0.30 FAR 0.00 – 0.75 FAR	
COG-C	not permitted.	0.00 – 0.73 FAR 0.00 – 1.30 FAR	
0000	Mixed Use Districts	0.00 1.001741	
Mixed Use Vertical— MU-V	The MU-V category is intended to provide for the development of properties for (a) mixed-use structures that vertically integrate housing with retail uses, where the ground floor shall be restricted to retail and other pedestrian-active uses along the street frontage and/or the upper floors used for residential units, or (b) structures containing nonresidential uses including retail, office, restaurant, and similar uses.	Mixed-Use Buildings: Floor area to land ratio of 1.5; where a minimum floor area to land ratio of 0.35 and maximum of 0.5 shall be used for nonresidential purposes and a maximum of 1.0 for residential. Nonresidential Buildings: Floor area to land area ratio of 0.75.	

Table 2.1.1-1 Land Use Plan Categories			
Land Use Category	Uses	Density/Intensity	
Mixed Use Horizontal— MU-H	The MU-H category is intended to provide for the development of areas for a horizontally distributed mix of uses, which may include general or neighborhood commercial, commercial offices, multi-family residential, visitor-serving and marine-related uses, and/or buildings that vertically integrate residential with commercial uses.	Mixed-Use Buildings: Floor area to land area ratio of 1.5, where a minimum floor area to land area ratio of 0.25 and maximum 0.5 shall be used for retail uses and maximum of 1.0 for residential. Nonresidential only: Floor area to land area ratio of 0.5. Residential only: 20.1–26.7 units per net acre.	
Mixed Use Water Related—MU-W	The MU-W category is intended to provide for commercial development on or near the bay in a manner that will encourage the continuation of coastal-dependent and coastal-related uses and visitor-serving uses, as well as allow for the development of mixed-use structures with residential uses above the ground floor. Freestanding residential uses shall be prohibited. Overnight accommodations (e.g. hotels, motels, hostels) are allowed. Limited Use Overnight Visitor Accommodations (e.g. time shares, fractionals, condominium-hotels) may be permitted in lieu of allowable residential development provided the use is above the ground floor.	Mixed-Use Buildings: Floor area to land ratio of 1.5; where a minimum floor area to land ratio of 0.35 and maximum of 0.7 shall be used for nonresidential purposes and a maximum of 0.8 for residential. Nonresidential only: Floor area to land area ratio of 0.5. Residential only: 15 units per acre per net acre.	

Table 2.1.1-1 Land Use Plan Categories			
Land Use Category	Uses	Density/Intensity	
Public, Semi-Public, and Institutional			
Public Facilities—PF	The PF category is intended to provide public facilities, including public schools, cultural institutions, government facilities, libraries, community centers, public hospitals, and public utilities.	Not applicable. School districts are exempted from local land use controls and development limits are not specified. Development intensities for other public institutions are more appropriately determined by their function rather than floor areas, such as number of hospital beds and number of students.	
Private Institutions—PI	The PI category is intended to provide for		
PI-A	privately owned facilities that serve the public,	0.00 – 0.30 FAR	
PI-B PI-C	including places for religious assembly, private schools, health care, cultural institutions, museums, yacht clubs, congregate homes, and comparable facilities.	0.00 – 0.75 FAR 0.00 – 1.00 FAR	
Opens Space—OS	The OS category is intended to provide areas for a range of public and private uses to protect, maintain, and enhance the community's natural resources.	Open spaces may include incidental buildings, such as maintenance equipment and supply storage, which are not traditionally included in determining intensity limits.	
Parks and Recreation— PR	The PR category applies to land used or proposed for active public or private recreational use. Permitted uses include parks (both active and passive), golf courses, marina support facilities, aquatic facilities, tennis clubs and courts, private recreation, and similar facilities.	Not applicable for public uses. Private uses in this category may include incidental buildings, such as maintenance equipment sheds, supply storage, and restrooms, not included in determining intensity limits. For golf courses, these uses may also include support facilities for grounds maintenance employees.	

Local Coastal Program Coastal Land Use Plan

Tidelands and Submerged Lands—TS Tidelands and Submerged Lands—TS Tidelands and Submerged Lands—TS Tidelands and Submerged Lands—TS Tidelands and Submerged lands of Newport Bay and the Pacific Ocean immediately adjacent to the City of Newport Beach. The category is generally not applied to historic tidelands and submerged lands that are presently filled or reclaimed. Density/Intensity Not applicable.	Table 2.1.1-1 Land Use Plan Categories			
Tidelands and Submerged Lands—TS use, management, and protection of tidelands and submerged lands of Newport Bay and the Pacific Ocean immediately adjacent to the City of Newport Beach. The category is generally not applied to historic tidelands and submerged Not applicable.	Land Use Category	Uses	Density/Intensity	
		use, management, and protection of tidelands and submerged lands of Newport Bay and the Pacific Ocean immediately adjacent to the City of Newport Beach. The category is generally	Not applicable.	

Notes:

Residential densities are calculated on net acreage, exclusive of existing and new rights-of-way, public pedestrian ways, and neighborhood parks.

Floor area ratios (FAR) are calculated by the gross floor area of all buildings on a lot divided by the lot area, but do not include floor areas of parking structures.



Lifeguard rescue boats

2.1.2 District/Corridor Policies

Districts are uniquely identifiable by their common functional role, mix of uses, density/intensity, physical form and character, and/or environmental setting. Newport Beach's coastal zone districts are in transition as existing viable districts are enhanced, underperforming properties are revitalized, and opportunities are provided to accommodate the City's fair share of regional housing needs.

Corridors share common characteristics of districts by their identifiable functional role, land use mix, density/intensity, physical form and character, and/or environmental setting. They differ in their linear configuration, generally with shallow depth parcels located along arterial streets. They are significantly impacted by traffic, often inhibiting access during peak travel periods. Their shallow depths make

them unsuitable for many contemporary forms of commercial development that require large building footprints and extensive parking.

Policy 2.1.2-1. Development in each district and corridor shall adhere to policies for land use type and density/intensity contained in Table 2.1.1-1, except as modified in Sections 2.1.3 to 2.1.8.

2.1.3 West Newport

The West Newport Coast Highway Corridor extends from Summit Street to just past 60th Street. It is a mixed commercial and residential area, with the former serving the adjoining Newport Shores residential neighborhood, the West Newport residential neighborhood south of Coast Highway, and beach visitors. Commercial uses are concentrated on the north side of Coast Highway at the Orange Street intersection and east of Cedar Street to the Semeniuk Slough. Intervening areas are developed with a mix of multi-family apartments and, west of Grant Avenue, mobile and manufactured homes.





Residential in West Newport

Commercial in West Newport

Primary commercial uses include community-related retail such as a dry cleaners, liquor store, deli, and convenience stores, as well as a few visitor-serving motels, dine-in, family-style restaurants, and fast-food establishments. Generally, they are developed on shallow parcels of substandard size and configuration due to past widening of West Coast Highway and contain insufficient parking. Many of the commercial buildings appear to have been constructed in the 1960's to 1980's, although some motels have been recently upgraded.

A portion of the mobile homes are situated along Semeniuk Slough and the Army Corps restored wetlands, while a number of the single-family homes outside the area are also located along the Slough. A mobile home park containing older units, many of which appear to be poorly maintained, is located on the westernmost parcels and

a portion of the tidelands. This site serves as the "entry" to the City and as a portal to the proposed Orange Coast River Park.

Coast Highway fronting properties in West Newport will be improved by concentrating local and visitor-serving retail in two centers at Prospect Street and Orange Street with expanded parking, enhancing existing and allowing additional housing on intervening parcels, and developing a clearly defined entry at the western edge with Huntington Beach. The latter may include improvements that would support the proposed Orange Coast River Park.

Policies:

- 2.1.3-1. Work with community groups and the County to facilitate the acquisition of a portion or all of the Western Entry Parcel (designated RM/OS) as open space, which may be used as a staging area for Orange Coast River Park with public parking, public park-related uses, and access to the ocean. As an alternative, accommodate multi-family residential on portions of the property not used for open space, public parking, and public park-related uses. Require the siting and design of new development, including landscaping and public access, to maintain buffers of sufficient size to protect sensitive or rare resources including but not limited to those within the Semeniuk Slough wetland against significant disruption of habitat values.
- **2.1.3-2.** Allow local and visitor-serving retail consistent with the CV category in two centers at Prospect Street and Orange Street.

2.1.4 Mariners' Mile

Mariners' Mile is a heavily traveled segment of Coast Highway extending from the Arches Bridge on the west to Dover Drive on the east. It is developed with a mix of highway-oriented retail and marine related commercial uses. The latter are primarily concentrated on bayfronting properties and include boat sales and storage, sailing schools, marinas, visitor-serving restaurants. comparable uses. A large site is developed with the Balboa Bay Club and Resort, a hotel, private club, apartments located on City tidelands. A number of properties contain non-marine commercial uses, offices, and a multistory residential building.

The vitality of the Mariners' Mile Corridor will be enhanced by establishing a series of distinct retail, mixed-use, and visitor-serving centers. Harbor-fronting properties would accommodate a mix of visitor-serving retail, marine-related businesses and vertically integrated mixed-use structures. View and public



Mariners' Mile

access corridors from Coast Highway to the Harbor would be required, with a public pedestrian promenade developed along the length of the Harbor frontage. Parcels on the inland side of Coast Highway, generally between Riverside Avenue and the southerly projection of Irvine Avenue, would evolve as a pedestrian-oriented mixed-use "village" containing retail businesses, offices, services, and housing. Sidewalks would be improved with landscape and other amenities to foster pedestrian activity. Inland properties directly fronting onto Coast Highway and those to the east and west of the village would provide for retail, marine-related, and office uses. Streetscape amenities are proposed for the length of Mariners' Mile to improve its appearance and identity.

Policies:

- 2.1.4-1. For properties located on the inland side of Coast Highway in the Mariners' Mile Corridor that are designated as MU-H, (a) the Coast Highway frontages shall be developed for marine-related and highway-oriented general commercial uses in accordance with CM and CG categories; and (b) portions of properties to the rear of the commercial frontage may be developed for free-standing neighborhood-serving retail, multi-family residential units, or mixed-use buildings that integrate residential with retail uses on the ground floor in accordance with the CN, RM, CV, or MU-V categories respectively.
- 2.1.4-2. For bay-fronting properties that are designated as MU-W, encourage marine-related and visitor-serving retail, restaurant, hotel, institutional, and recreational uses. Vertically integrated mixed use structures are allowed as described below. Permitted uses include those permitted by the CM, CV, and MU-V categories. On sites developed with mixed-use structures, a minimum of 50 percent of the permitted square footage shall be devoted to non-residential uses. Mixed-use structures may only be developed on sites with 200 feet or more of street frontage along Coast Highway and, in aggregate, no more than 50 percent of the waterfront land area along Coast Highway between the Arches Bridge and the Boy Scout Sea Base may be developed with mixed use structures.
- **2.1.4-3.** Permit development intensities in areas designated as CG to be increased to a floor area ratio of 0.5 where parcels are consolidated to accommodate larger commercial development projects that provide sufficient parking.
- **2.1.4-4.** For bay-fronting properties that are designated as CV or CM, encourage marine-related and visitor-serving retail, restaurant, hotel/motel, institutional, and recreational uses.
- **2.1.4-5.** Development shall be designed and planned to achieve high levels of architectural quality and compatibility among on-site and off-site uses. Adequate pedestrian, non-automobile and vehicular circulation and parking shall be provided.
- **2.1.4-6.** Require sufficient area be provided for individual uses to prevent fragmentation and assure each use's viability, quality, and compatibility with adjoining uses.

- **2.1.4-7.** For bay-fronting properties, provide plazas and other open spaces that protect existing and provide new view corridors and access from Coast Highway to the Harbor.
- **2.1.4-8.** For bay-fronting properties, require that development on the Bay frontage implement amenities that assure access for coastal visitors including the development of a public pedestrian promenade along the bayfront.
- **2.1.4-9.** For bay-fronting properties require that buildings be located and sites designed to provide clear views of and access to the Harbor and Bay from the Coast Highway in accordance with the following principles, as appropriate:
 - Clustering of buildings to provide open view and access corridors to the Harbor
 - Modulation of building volume and mass
 - Variation of building heights
 - Inclusion of porticoes, arcades, windows, and other "see-through" elements in addition to the defined open corridor
 - Minimization of landscape, fencing, parked cars, and other nonstructural elements that block views and access to the Harbor
 - Prevention of the appearance of the harbor being walled off from the public right-of-way
 - Inclusion of setbacks that in combination with setbacks on adjoining parcels cumulatively form functional view corridors
 - Encourage adjoining property owners to combine their view corridors to achieve a larger cumulative corridor than would be achieved independently
 - A site-specific analysis shall be conducted for new development to determine the appropriate size, configuration, and design of the view and access corridor that meets these objectives, which shall be subject to approval in the Coastal Development Permit process.

2.1.5 Balboa Peninsula

Lido Village, Cannery Village, McFadden Square, and Balboa Village are to be enhanced as distinct pedestrian-oriented centers of Balboa Peninsula that would be interconnected through improved streetscapes along Newport/Balboa Boulevard, a waterfront promenade on Newport Harbor, and cross-access between the Harbor and beachfront. Lido Village, McFadden Square, and Balboa Village would contain a mix of visitor-serving, retail, small overnight accommodation facilities, and housing.

Throughout the Peninsula, priority is established for the retention of marine-related uses.

Lido Village

Lido Village is primarily developed with commercial uses including grocery stores. restaurants. salons, home furnishings, apparel, and other specialty shops. It also includes Lido Marina Village, a pedestrian-oriented waterfront development that includes visitor-serving commercial uses, specialty stores, and marine uses.



Pedestrian-oriented retail use in Lido Village



Movie theater in Lido Village

Lido Marina Village has experienced a high number of building vacancies and many retail stores are underperforming. Parking is limited. Multiple property ownerships have traditionally inhibited cohesive and integrated development.

Lido Village has a unique location at the turning basin in Newport Harbor. The channel is wider than in other locations, providing an opportunity for waterfront commercial uses that will not negatively impact residential uses across the channel.

Cannery Village

Cannery Village is the historic center of the City's commercial fishing and boating industry and contains a mix of small shops, art galleries, professional offices, and service establishments. Marine-related commercial (boat sales) and marine-related industrial uses (boat repair) are also found in the area. Redevelopment of properties for residential, loft, and mixed residential and commercial uses, including live/work facilities, appears to be an emerging trend. Older developments include some single-family residential units combined with commercial uses on single lots. Although the residential component of mixed-use projects has performed well, there

has been less success in attracting the commercial uses envisioned for the area particularly on the waterfront.

The goal in Cannery Village is a pedestrianoriented residential neighborhood that provides opportunities for live/work facilities and supporting retail uses. Commercial or mixed-use buildings would be developed at street intersections with intervening parcels developed for mixed-use or free-standing housing and a mix of marine-related, residential uses on the Bay frontage, and



Cannery Village boardwalk

retail and visitor-serving uses along Newport Boulevard Corridor.

McFadden Square

McFadden Square surrounds the Newport Pier and extends between the ocean front Commercial land uses are and harbor. largely concentrated in the strips along Balboa and Newport Boulevards, residential along the ocean front and marinerelated uses fronting the harbor. Numerous visitor-serving uses include restaurants. beach hotels, tourist-oriented shops (t-shirt shops, bike rentals, and surf shops), as well as service operations and facilities that serve the Peninsula. There are several bars in the with some featuring live music, especially along the ocean front.



McFadden Square Plaza

Historically, the area has been known for its marine-related industries such as shipbuilding and repair facilities and boat storage on the harbor, some of which have been in continuous operation for over fifty years. Public parking is available in three lots, which primarily serve the beach users, tourists, and the restaurant patrons.



Newport Pier

The goal in McFadden Square is to revitalized the area as a pedestrian-oriented village that reflects its location on the ocean, pier, and bay front, serving visitors and local residents

Lido Peninsula

The MU-W is applied to the Lido Peninsula to provide for the horizontal intermixing of recreational and marine-related and residential uses, in accordance with CM and RM categories respectively.



Lido Peninsula commercial

Balboa Village

Balboa Village is the historic center for recreational and social activities on the Peninsula. It has had a strong marine heritage, and has attracted fishermen, recreational boaters, summer residents, and beachgoers. Many of the retail uses are visitor-oriented and seasonal in nature, including a "fun zone" along Place that Edgewater contains entertainment uses. Marine-related commercial uses, including ferries to Balboa and Catalina Islands and harbor Balboa Village tours, are present in the area.



general, Balboa Village is pedestrian-oriented with articulated building facades, and signage that is pedestrian scale. The Balboa Village core is surrounded by residences, with isolated pockets of commercial uses scattered along Balboa Boulevard. Peninsula Park also serves the area.

Balboa Village and the greater Peninsula have experienced a transition to yearround residential occupancy while the visitor uses have continued. Cumulatively, there is more commercial space than can be supported by local residents, and marginal commercial space is used by businesses that are seasonal and do not thrive throughout the year.

Balboa Village will continue to serve as the primary center of the lower Peninsula, surrounded by residential neighborhoods along and flanking Balboa Boulevard. The goal is an economically viable pedestrian oriented village that serves local residents, visitors, and provides residential in proximity to retail uses, entertainment, and recreation.



Main Street - Balboa Village

Policies:

- 2.1.5-1. For bay-fronting properties that are designated as MU-W, marine-related uses may be intermixed with buildings that provide residential on the upper floors. Permitted uses include those permitted by the CM, CV, and MU-V categories. In the MU-W designation, free-standing and ground floor residential shall not be permitted in Lido Marina Village, Cannery Village, McFadden Square, and Balboa Island.
- 2.1.5-2. Encourage uses that take advantage of Lido Village's location at the Harbor's turning basin and its vitality and pedestrian character, including visitor-serving and retail commercial, small lodging facilities (bed and breakfasts, inns), and mixed-use buildings that integrate residential above the ground floor with retail uses.
- **2.1.5-3.** Discourage the development of new office uses on the ground floor of buildings in Lido Village that do not attract customer activity to improve the area's pedestrian character.
- 2.1.5-4. In Lido Marina Village (designated as MU-W), marine-related uses may be intermixed with buildings that provide residential on the upper floors. Permitted uses include those permitted by the CM, CV, and MU-V categories. Free-standing residential shall not be permitted.
- 2.1.5-5. For interior parcels in Cannery Village and at 15th Street (designated as MU-H), permit mixed-use structures, where the ground floor shall be restricted to nonresidential uses along the street frontage such as retail sales and restaurants and the rear and upper floors used for residential including seniors units and overnight accommodations (comparable to MU-V). Mixed-use or commercial buildings shall be required on parcels at street intersections with intervening parcels developed for mixed-use or free-standing housing.
- **2.1.5-6.** Allow retail and visitor-serving commercial along the Newport Boulevard Corridor consistent with the CV category.
- 2.1.5-7. Accommodate visitor- and local-serving uses that take advantage of McFadden Square's waterfront setting including specialty retail, restaurants, and small scale overnight accommodations, as well as mixed-use buildings that integrate upper floor residential with ground level retail.

- **2.1.5-8.** On the Lido Peninsula, CM development shall occupy 30 percent of the total land area and residential development shall occupy 70 percent of the land area. One residential dwelling unit is allowed for each 2,900 square feet of lot area.
- **2.1.5-9.** On the Balboa Village bay frontage (designated as CV), prioritize water-dependent, marine-related retail and services and visitor-serving retail.
- **2.1.5-10.** For the Balboa Village core properties that are designated as MU-V, encourage local- and visitor-serving retail commercial and mixed-use buildings that integrate residential with ground level retail or office uses that attract customer activity and improve pedestrian character.
- **2.1.5-11.** Development and use of lands designated CV (Visitor Serving Commercial) within Balboa Village may include a component that is a visitor serving private institutional facility such as a nautical museum, or similar visitor serving private institutional use.

2.1.6 Balboa Island

Marine Avenue is a two-block retail district on Balboa Island. Marine Avenue reflects the unique characteristics of the Balboa Island community. Balboa Island is known for its casual and laid-back lifestyle and Marine Avenue serves as its town square. Marine Avenue has a number of small-scale, locally-owned businesses, including restaurants, retail shops, art galleries, and services. This small-town downtown atmosphere



has made Marine Avenue a popular visitor destination.

Marine Avenue

Although Marine Avenue does not have the typical "tourist-driven" mix of shops and businesses, visitors are drawn there to experience a Southern California coastal island community. The number and variety of businesses cannot be supported by the local economy alone and without local support, most of these businesses could not survive year-round. Therefore, the continued success of the retail economy on Marine Avenue is contingent on businesses that serve both local residents and visitors.

Policy 2.1.6-1. On Marine Avenue and Agate Avenue (designated as MU-W), marine-related uses may be intermixed with buildings that provide residential on the upper floors. Permitted uses include those permitted by the CM, CV, and MU-V category. Freestanding residential shall not be permitted.

2.1.7 Newport Dunes

The Newport Dunes consists of 100 acres of State tidelands property on the Upper Newport Bay held in trust by the County of Orange. This area is designated PR and is intended for recreational and visitor-serving uses. Land uses and development limits are established pursuant to the Newport Dunes Settlement Agreement. The site is currently developed with a 406-space recreational vehicle park, a 450-slip marina, a



restaurant, dry boat storage, boat launching facilities, surface parking, and beach day use Newport Dunes Aquatic Park facilities. This area also includes an undeveloped

site for a 275-room hotel with up to 500,000 square feet of floor area, 27,500 square feet of floor area for restaurants, and 5,000 square feet of floor area for retail commercial.

Policies:

- 2.1.7-1. Protect, and if feasible, expand and enhance, the variety of recreational and visitor-serving uses. Particular attention should be given to provision of lower cost uses.
- 2.1.7-2. New development shall provide for the protection of the water quality of the bay and adjacent natural habitats. New development shall be designed and sited to minimize impacts to public views of the water and coastal bluffs.

2.1.8 Balboa Bay Tennis Club

Located in Newport Center, the Balboa Bay Tennis Club is designated MU-H/PR. This is in recognition of the private recreational tennis courts and the potential development of short-term rental bungalows and a limited number of single-family homes.

Policy 2.1.8-1. Allow the horizontal intermixing of short-term rental units and single-family homes with the expanded tennis club faculties. Permitted uses include those permitted by the MU-H and PR categories.

2.1.9 Coastal Land Use Plan Map

The Coastal Land Use Plan Map depicts the land use category for each property and is intended to provide a graphic representation of policies relating to the location, type, density, and intensity of all land uses in the coastal zone.

Policy 2.1.9-1. Land uses and new development in the coastal zone shall be consistent with the Coastal Land Use Plan Map and all applicable LCP policies and regulations.

2.2 General Development Policies

2.2.1 Location of New Development

Coastal Act policies related to the location of new development that are relevant to Newport Beach include the following:

30250 (a). New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

30252. The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

The Coastal Act provides for the protection of coastal resources by requiring that new development be located in areas in close proximity to existing development with available public services to minimize the impacts associated with the extension of infrastructure and services. Most of the areas of Newport Beach's coastal zone were developed during the first half of the 20th Century. Therefore, new development within the coastal zone will occur in the form of redevelopment or infill development within or adjacent to existing developed areas. These areas have adequate public services or are capable of having public services extended or expanded without significant adverse effects on coastal resources.



The only exception is the 505-acre Banning Ranch property. Save for oil field facilities, Banning Ranch is undeveloped, but is contiguous to the developed areas of Newport Beach, Costa Mesa, and Huntington Beach. Banning Ranch is designated as a deferred certification area due to unresolved land use and resource protection issues (see Section 2.2.4).

Banning Ranch

Policies:

2.2.1-1. Continue to allow redevelopment and infill development within

and adjacent to the existing developed areas in the coastal zone subject to the density and intensity limits and resource

protection policies of the Coastal Land Use Plan.

2.2.1-2. Require new development be located in areas with adequate

public services or in areas that are capable of having public services extended or expanded without significant adverse

effects on coastal resources.

2.2.1-3 Provide commercial facilities within or adjoining residential

development or in other areas that will minimize the use of

coastal access roads.

2.2.2 Coastal Development Review

Coastal Act policies related to development review that are relevant to Newport Beach include the following:

30600 (a). Except as provided in subdivision (e), and in addition to obtaining any other permit required by law from any local government or from any state, regional, or local agency, any person, as defined in Section 21066, wishing to perform or undertake any development in the coastal zone, other than a facility subject to Section 25500, shall obtain a coastal development permit.

30600 (d). After certification of its local coastal program or pursuant to the provisions of Section 30600.5, a coastal development permit shall be obtained from the local government as provided for in Section 30519 or Section 30600.5.

In order to ensure that development within the coastal zone is consistent with the LCP and any applicable policies from Chapter 3 of the Coastal Act, the City will require a coastal development permit prior to commencement of any development in the coastal zone, with the exceptions of developments in areas where the Coastal Commission retains permit jurisdiction, developments where an amendment to a Coastal Commission-

issued permit is required, developments determined to be categorically excluded according to the categories and



Beachfront residential development on the Balboa Peninsula

standards established by the Coastal Commission, and developments determined to be excluded from the coastal development permit requirements pursuant to Public Resources Code Section 30610 and its implementing regulations. Development may also be excluded from permit requirements pursuant to Public Resources Code Sections 30005 (b), 30608 and 30600 (e), which address nuisance abatement, vested rights and emergency circumstances, respectively.

- **2.2.2-1.** After certification of the LCP, require a coastal development permit for all development within the coastal zone, subject to exceptions provided for under the Coastal Act as specified in the LCP.
- **2.2.2-2.** Incorporate coastal development permit procedures into the implementation plan to ensure that all public and private development in the coastal zone is consistent with the LCP.
- **2.2.2-3.** Prior to approval of any coastal development permit, the City shall make the finding that the development conforms to the policies and requirements contained in the Coastal Land Use Plan.
- **2.2.2-4.** Implement building design and siting regulations to protect coastal resources and public access through height, setback, floor area, lot coverage, building bulk, and other property development standards of the Zoning Code intended to control building placement, height, and bulk.



Beachfront homes in West Newport

2.2.3 Exclusion Areas

Excerpts from specific Coastal Act sections related to exclusion areas that are relevant to Newport Beach include the following:

30610. Notwithstanding any other provision of this division, no coastal development permit shall be required pursuant to this chapter for the following types of development and in the following areas:

(e) Any category of development, or any category of development within a specifically defined geographic area, that the commission, after public hearing, and by two-thirds vote of its appointed members, has described or identified and with respect to which the commission has found that there is no potential for any significant adverse effect, either individually or cumulatively, on coastal resources or on public access to, or along, the coast and, where the exclusion precedes certification of the applicable local coastal program, that the exclusion will not impair the ability of local government to prepare a local coastal program.

Section 30610 (e) of the Coastal Act provides for a category of development, or a category of development within a specifically defined geographic area, to be excluded from the coastal development permit provisions of the Coastal Act provided there is no potential for any significant adverse effect, either individually or cumulatively, on coastal resources or on public access to, or along, the coast.

Residential Areas

On June 14, 1977. the Coastal Categorical Commission adopted Exclusion Order E-77-5, at the request of the City of Newport Beach pursuant to Section 30610 (e) of the Coastal Act. The categorical exclusion is for the demolition and/or construction of all single-family and two-family residences and their appurtenant facilities in most residentially-zoned districts within the City of Newport Beach within the coastal zone. The categorical exclusion, however, does not include the first row of lots adjacent to the beach, bay or Infill residential development in Corona del Mar wetlands nor is the categorical exclusion



applicable to major undeveloped residential sites within the coastal zone, Planned Community zoned districts or gated communities within the City. In Resolution No. 9190, the City Council found and determined that the exclusion applies only to Balboa Island, the Balboa Peninsula, Cameo Highlands, Cameo Shores, Corona del Mar, Corona Highlands, Irvine Terrace, Lido Isle, Shorecliffs, the Upper Bay and West Newport. Pursuant to Section 13249 (b) of the California Code of Regulations. a categorical exclusion order automatically terminates upon the effective date of the delegation of development review authority to a local government.

Categorical Exclusion Order E-77-5 will terminate when the LCP is certified and adopted.

The categorical exclusion was adopted in recognition that the residential areas in question contained little vacant land and that new development consisted primarily of the conversion of single-family dwellings to two-family dwellings and the replacement and improvement of existing single-family and two-family residences. These residential areas consist of well-established neighborhoods. Development in the 27 years since the adoption of the categorical exclusion has continued to be in the form of redevelopment or infill projects. The permitted residential unit type and maximum density of the Coastal Land Use Plan reflect the predominant form of development in these areas. Residential floor areas and building heights have been strictly controlled since the early 1970's to insure that the scale, size, and character of new development is compatible with existing development in the surrounding area. Therefore, the City will seek a new categorical exclusion for these residential areas concurrently with certification of the LCP.

Commercial Areas

The Corona del Mar commercial area is generally located along Coast Highway between Avocado Street (including the southwest corner) and Hazel Drive. Only the south side of Coast Highway is located within the coastal zone. It has been zoned for commercial uses since 1936 and developed as a business district for over 75 years. The commercial area is completely urbanized and development is limited to a maximum floor area to land area ratio of 0.75. Unlike other coastal commercial areas



Coast Highway in Corona del Mar

that largely serve the visitor market, Corona del Mar has the broadest base of local-serving retailers. The portion of the Corona del Mar commercial area located in the coastal zone is located 1,000 to 2,500 feet from the shoreline. Given this commercial area's considerable distance from the shoreline and minimal use by coastal zone users, there is no potential for significant adverse effects, either individually or cumulatively, on public access to the coast or on coastal resources. Therefore, the City should seek a categorical exclusion for this commercial area concurrently with certification of the LCP.

- **2.2.3-1.** Pursuant to Section 30610 (e) of the Coastal Act, request a categorical exclusion for the residential areas: Balboa Island, the Balboa Peninsula, Cameo Highlands, Cameo Shores, Corona del Mar, Corona Highlands, Irvine Terrace, Lido Island, Newport Center, Newport Heights, Newport Shores, Shorecliffs, Upper Newport Bay, and West Newport.
- **2.2.3-2.** Pursuant to Section 30610 (e) of the Coastal Act, request a categorical exclusion for the portion of the Corona del Mar commercial area located in the coastal zone, which consists of all commercial properties on the south side of Coast Highway between Avocado Street (including the southwest corner) and Hazel Drive.
- **2.2.3-3.** Incorporate the terms and conditions of categorical exclusions into the implementation plan.
- **2.2.3-4.** Provide a graphical representation of the terms of the categorical exclusion order by depicting the subject properties on a Permit and Appeal Jurisdiction Map and incorporate into the implementation plan. In case a conflict exists between the Permit and Appeal Jurisdiction Map and the text of the categorical exclusion order, the text of the categorical exclusion order shall govern the terms of the exclusion.

2.2.4 Deferred Certification Areas

Deferred Certification Area (DCA) refers to an area which has not been officially segmented for purposes of LCP preparation and where both the land use plan and implementation plan have been deferred to some future date in order to avoid delay in certifying the balance of the LCP. The Coastal Commission retains permit jurisdiction in all deferred certification areas.

Banning Ranch. Banning Ranch consists of 505 acres located north of the Semeniuk Slough and Coast Highway West and east of the Santa Ana River. Nearly all of Banning Ranch (454 acres) is located within the City's sphere of influence in unincorporated Orange County. Oil and gas operations are conducted throughout the County portion of the property (West Newport Oil Field) pursuant to California Coastal Commission Exemption E-144. These operations consist of 483 producing, idle, injection, and abandoned well sites and related service roads, pipelines, storage, and other facilities. The property contains a number of sensitive habitat types, including southern coastal bluff scrub, alkali meadow, southern coastal salt marsh, southern black willow forest, coastal brackish marsh, and vernal pools. The property also contains steep coastal bluffs along the southern and western edges of the mesa. The bluff faces have been eroded in some areas to form a number of gullies and ravines. Future land uses for Banning Ranch are currently under review

as part of a comprehensive update of the City of Newport Beach General Plan.

Banning Ranch shall remain a deferred certification area until such time as the future land uses for the property are resolved and policies are adopted to address the future of the oil and gas operations, public access, and the protection of the coastal resources on the property.



Banning Ranch

Policies:

- **2.2.4-1.** Designate the Banning Ranch property as an area of deferred certification until such time as the future land uses for the property are resolved and policies are adopted to address the future of the oil and gas operations and the protection of the coastal resources on the property.
- **2.2.4-2.** Depict the boundaries of deferred certification areas on the Coastal Land Use Plan Map and other applicable LCP maps.
- **2.2.4-3.** The Coastal Commission shall retain permit jurisdiction in all deferred certification areas.

2.2.5 Nonconforming Structures and Uses

As one of the older coastal communities, Newport Beach has land uses and improvements that do not conform to the standards of the LCP or other policies and regulations that have been adopted over the years. This section is intended to establish policies to limit the expansion of nonconforming structures and uses to the maximum extent feasible and to bring these structures and uses into conformity in a timely manner, without infringing upon the constitutional rights of property owners. **Policies:**

2.2.5-1. Legal nonconforming structures shall be brought into conformity in an equitable, reasonable, and timely manner as rebuilding occurs. Limited renovations that improve the physical quality and character of the buildings may be allowed. Rebuilding after catastrophic damage or destruction due to a natural event, an act of public enemy, or accident may

- be allowed in limited circumstances that do not conflict with other policies and of the Coastal Land Use Plan.
- 2.2.5-2. In the older commercial districts of Balboa Village and Corona del Mar, allow existing commercial buildings that exceed current intensity limits to be renovated, upgraded, or reconstructed to no more than their existing intensity only where a finding can be made that the development will not perpetuate or establish a physical impediment to public access to coastal resources, nor adversely impact coastal views or biological resources. Where such development cannot meet current parking standards, such approval may only be granted if the proposed development includes at least as much parking as the existing development, and provides for or facilitates the use of alternative modes of transportation such as ridesharing, carpools, vanpools, public transit, bicycling or walking to the extent feasible.
- **2.2.5-3.** When proposed development would involve demolition or replacement of 50 percent or more of the exterior walls of an existing structure that is legally non-conforming due to a coastal resource protection standard, the entire structure must be made to conform with all current development standards and applicable policies of the Coastal Land Use Plan..
- 2.2.5-4. The enlargement or intensification of legally established nonconforming uses shall be limited to only those uses normally permitted by right or by the approval of a use permit, but which were made nonconforming by additional regulations of the district in which they are located. Such enlargement or intensification shall be subject to discretionary review and approval by the City and shall not increase the degree of the use's nonconformity.

2.3 Visitor-serving and Recreational Development

Coastal Act policies related to visitor-serving and recreational development that are relevant to Newport Beach include the following:

30213. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

30221. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

30222. The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

30223. Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Newport

30250 (c). Visitor-serving facilities that cannot feasibly be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors.

Beach

2.3.1 Commercial



commercial areas within the coastal zone. These areas range from small strip commercial areas to large hotel complexes. Most of the coastal zone's commercial development is in the City's older business districts. These business districts were originally developed to serve harbor-related businesses and industries and to serve the City's original residential areas. Over the years, portions of these business districts have been redeveloping to visitor-oriented retail, water-related businesses, recreational uses, and commercial/residential projects. The Coastal Land Use Plan allows for the continuation of this trend, while continuing to provide businesses that serve the needs of residents and are essential to the harbor operations.

has

thirty-seven

distinct

Oceanfront Boardwalk near Newport Pier

Visitor-serving and recreational activities are an important part of the character and economy of Newport Beach. In 2003, Newport Beach had 14 hotels, motels, timeshares, and bed & breakfast inns in the coastal zone and 18 citywide. These facilities provide a total of 2,287 rooms in the coastal zone and 3,520 rooms citywide. In FY 2001, Newport Beach received 7.2 million visitors (people other than those

who reside or work here). Over 80 percent of the City's visitors are here for purposes of leisure and the vast majority are day visitors.

Other visitor-serving and recreational facilities located within commercial areas include restaurants, snack bars, boat rentals, sports equipment rentals, boat tours of the harbor, boat launching facilities, amusement and recreation facilities, and numerous shops selling specialized merchandise. Many of these facilities have become tourist attractions in their own right, such as the Balboa Pavilion, the Fun Zone, Balboa Ferry, the entire Marine Avenue area on Balboa Island, and certain restaurants.



Edgewater boardwalk in Balboa Village

Most of the lands suitable for visitor-serving and recreational uses are in the commercial areas surrounding and adjacent to the west end of Newport Harbor. Most of the waterfront land in this area has been designated for recreational and marine uses. Also, individual hotel and motel sites on the Balboa Peninsula, in West Newport, and adjacent to the Upper Newport Bay and other open space areas are designated for visitor-serving uses.

A 2002 retail commercial market analysis verifies that the City's main coastal zone commercial areas largely serve the visitor market. In Balboa Village, Balboa Island, McFadden Square, and Mariner's Mile, visitors (people from outside each study area) account for the vast majority of retail sales. On Balboa Island, retail sales are dominated by apparel stores, specialty retail stores, and restaurants, which generally sell to tourists and other non-residents. In McFadden Square and Balboa Village, which are adjacent to beaches, restaurants are the single most prominent retail sales category, followed by apparel and sporting goods stores that primarily cater to visitors.

Visitor Spending in Coastal Zone

Commercial Area	Percentage of Retail Spending By Visitors
Balboa Island	85.1%
Balboa Village	80.9%
Corona del Mar	75.8%
Lido-Cannery	48.0%
McFadden Square	86.0%
Mariner's Mile	96.6%

Source: Newport Beach General Plan Update Retail Commercial Market Analysis, December 2002.

The lower percentage of retail spending by visitors in Lido-Cannery is due primarily to the presence of two large grocery stores that serve West Newport, Lido Isle, and the Balboa Peninsula and constitute over half of the retail sales. The extremely high percentage of retail spending by visitors in Mariner's Mile is due primarily to the high concentration of restaurants, entertainment boat operations, automobile and boat dealers, and marine-related retail stores.



McFadden Square shops on the Oceanfront Boardwalk

While the coastal zone commercial areas are heavily oriented to the visitor market, some commercial areas are also underperforming McFadden Square and Balboa economically. Village have sales per square foot that are below national averages in nearly every retail category. Many businesses have to drastically reduce their hours of operation or close down completely during the winter months. This often gives an impression of economic stagnation and can detract from the ability of the commercial district to attract customers. Therefore, these areas should continue to be permitted a wider range of commercial uses in order to maintain vear-around economic viability.

While a high proportion of spending in Corona del Mar is by visitors, many of the categories represented are not necessarily visitor-oriented.

About half of the retail sales are generated by grocery stores and furniture, home furnishings, and home improvement stores. This indicates that much of the retail spending in Corona del Mar is from customers from neighboring communities, but who are not necessarily coastal zone visitors. This is to be expected since the portion of the Corona del Mar commercial area located in the coastal zone is 1,000 to 2,500 feet from the shoreline.

- **2.3.1-1.** Permit visitor-serving retail and eating and drinking establishments in all commercially designated areas.
- **2.3.1-2.** Continue to provide waterfront-oriented commercial uses, including eating and drinking establishments and recreation and entertainment establishments, as a means of providing public access to the waterfront.

- **2.3.1-3.** On land designated for visitor-serving and/or recreational uses, give priority to visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation over other commercial uses, except for agriculture and coastal-dependent industry.
- **2.3.1-4.** Protect oceanfront land designated for visitor-serving and/or recreational uses for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.
- **2.3.1-5.** Protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.
- **2.3.1-6.** Where feasible, reserve upland areas necessary to support coastal recreational uses for such uses.
- **2.3.1-7.** Give priority to visitor-serving and recreational uses in the mixed-use areas of the Balboa Peninsula, and Balboa Island.
- 2.3.1-8. LCP Amendment No. 2005-001 (NPB-MAJ-1-06 Part A) to the Coastal Land Use Plan changing a portion of land, not to exceed 4.25 acres in size, designated Visitor-Serving Commercial (CV) in Newport Center to a residential designation shall require a payment of a fee to mitigate for the loss of visitor-serving land. The mitigation fee shall be used for the protection, enhancement and provision of lower-cost visitorserving uses at Crystal Cove State Park. The mitigation fee shall be in the amount of five million (5,000,000.00) dollars to off-set the loss of the priority land use in Newport Center. The mitigation fee shall be paid prior to issuance of any coastal development permit granted for any residential project within the newly designated area and to an entity, identified by the permitting agency, capable of implementing the mitigation at Crystal Cove State Park. Until paid in accordance with the terms and conditions of the coastal development permit, the amount shall be increased every July 1st by an amount calculated on the basis of the percentage change from the year 2007 in the California Consumer Price Index for Urban Consumers as determined by the entity that grants the coastal development permit.

- 2.3.1-9. In Mariner's Mile, require that development on the Bay frontage implement amenities that assure access for coastal visitors. Pursue development of a pedestrian promenade along the Bayfront.
- 2.3.1-10. Support continued operation of passenger/sightseeing passenger/fishing boats ("day boats"), and long-term boat rentals and sales.
- 2.3.1-11. Support continued short-term rental of small boats while encouraging vendors to teach customers how to safely operate the watercraft.
- 2.3.1-12. Support continued operation of entertainment and tour boats subject to reasonable regulations designed to ensure the operations don't have an adverse impact, such as unsafe navigation, impaired water quality, reduced visual quality, excessive noise, unsafe street traffic conditions, or parking shortages on the environment and land uses surrounding the harbor.
- 2.3.1-13. Any proposal to demolish existing overnight accommodations shall be required to demonstrate that rehabilitation of the units is not feasible. Any hotel/motel rooms for which a certificate of occupancy has been issued on or before the effective date of adoption of Coastal Land Use Plan Amendment No. 2007-001 (NPB-MAJ-1-07) shall not be permitted to convert to a Limited Use Overnight Visitor Accommodation, except as provided in Policy 2.3.3-7.

2.3.2 Open Space and Tidelands/Submerged Lands

Newport Beach's open space designated areas in the coastal zone include beaches, parks, golf courses, yacht clubs, and environmentally sensitive habitat areas and other natural resources. These areas provide a wide range of recreational and visitor-serving uses and facilities.

Nearly all of the oceanfront land, including the entire Balboa Peninsula, is public beach. In total, there are over 276 acres of public beaches on the shoreline. There are also approximately 415 acres of recreational and Rowing in the Upper Newport Bay view parks on or adjacent to the shoreline.



Tidelands and submerged lands are State lands held in trust by the City of Newport Beach, the County of Orange or State resource agencies. These lands are subject to the public trust doctrine and are limited to public trust uses, such as navigation, fisheries, commerce, public access, water-oriented recreation, open space and environmental protection. The waters of Newport Bay and of the Pacific Ocean adjacent to Newport Beach are used for a wide variety of recreational activities, including boating, diving, excursions, fishing, kayaking, paddle boarding, parasailing, rowing, sailing, surfing, swimming, and wind surfing. Development in the form of marinas, moorings, piers, and equipment rentals provide recreational opportunities and access to the water.

The Newport Dunes Aquatic Park is on 100 acres of State tidelands property held in trust by the County of Orange. The park is leased to a private operator and provides a recreational vehicle park, campgrounds, a marina, boat launching and storage facilities, beach day use facilities, and a swimming lagoon.

Policies:

- **2.3.2-1.** Continue to use public beaches for public recreational uses and prohibit uses on beaches that interfere with public access and enjoyment of coastal resources.
- **2.3.2-2.** Continue to designate lands to provide visitor-serving and recreational facilities and view parks on or adjacent to the shoreline.

Pirate's Cove



2.3.2-3. Cooperate with the County of Orange to continue to provide a variety of visitor-serving and recreational uses at the Newport Dunes,

including recreational vehicle park and campground areas as a means of providing alternative and lower cost overnight accommodations.

2.3.2-4. Continue to administer the use of tidelands and submerged lands in a manner consistent with the tidelands trust.

2.3.3 Lower Cost Visitor and Recreational Facilities



Camping at Newport Dunes

Newport Beach currently provides a variety of overnight visitor accommodations in all price ranges. In 2003. Newport Beach had 14 hotels. motels, timeshares, and bed & breakfast inns in the coastal zone providing 2,287 rooms. Peak summer rates ranged from \$69 to \$750 per night. The Newport provides 406-space Dunes а recreational vehicle park, with tent camping permitted. In 2003, peak summer rates ranged from \$42 to \$139 per night.

A significant number of single-family homes, condominiums, and apartments overnight serve visitor as accommodations. Each year, hundreds of dwelling units in coastal residential areas are rented on a weekend, weekly or monthly basis. Most of these dwelling units have beach or bay front locations or are located within walking distance to the water. Because they typically provide additional sleeping accommodations and fully equipped kitchens, they provide an accommodation option comparable to or less expensive than staying in hotels and going out to restaurants for meals. Particularly for



West Newport motel

large families, these dwelling units provide an affordable alternative to hotels and motels. In 2003, weekly rates are as low as \$900. The City requires short-term lodging permits for dwelling units rented for 30 days or less to insure that

overcrowding and public nuisances do not result in adverse impacts to residential areas, coastal access, and coastal resources (see Section 2.7). In 2003, the City issued over 800 short-term lodging permits.

The City provides approximately 360 acres of public beaches and parks in the coastal zone, which are available free of charge. Also, the County's Upper Newport Bay Nature Preserve and the day use facilities at the County's Newport Dunes Aquatic Park are available free of charge. These areas offer a variety of free or lower cost recreational opportunities and are discussed further in Section 3.2.

The City, County, and private organizations also provide several coastal-related educational and interpretative facilities and programs that are either free or have a nominal charge. These include the Muth Interpretative Center in the Upper Newport Bay Nature Preserve, the Back Bay Science Center on Shellmaker Island, the Newport Aquatic Center at North Star Beach, and the Newport Harbor Nautical Museum.

- 2.3.3-1. Lower-cost visitor and recreational facilities, including campgrounds, recreational vehicle parks, hostels, and lower-cost hotels and motels, shall be protected, encouraged and, where feasible, provided. Developments providing public recreational opportunities are preferred. New development that eliminates existing lower-cost accommodations or provides high-cost overnight visitor accommodations or limited use overnight visitor accommodations such as timeshares, fractional ownership and condominium-hotels shall provide lower-cost overnight visitor accommodations commensurate with the impact of the development on lower-cost overnight visitor accommodations in Newport Beach or pay an "in-lieu" fee to the City in an amount to be determined in accordance with law that shall be used by the City to provide lower-cost overnight visitor accommodations.
- 2.3.3-2. Encourage new overnight visitor accommodation developments to provide a range of rooms and room prices in order to serve all income ranges. Consistent with Section 30213 of the Coastal Act, the City shall in no event (1) require that overnight room rental be fixed at an amount certain for any privately owned and operated hotel, motel, or other similar visitor-serving facility located on either public or private land; nor (2) establish or approve any method for the identification of low or moderate income persons for the purpose of determining eligibility for overnight room rentals in any such facilities.

- **2.3.3-3.** Identify, protect, encourage and provide lower-cost visitor-serving and recreation facilities, including museums and interpretative centers.
- **2.3.3-4.** Encourage visitor-serving and recreational developments that provide public recreational opportunities.
- 2.3.3-5. Continue to provide and protect public beaches and parks as a means of providing free and lower-cost recreational opportunities.
- 2.3.3-6. Continue to issue short-term lodging permits for the rental of dwelling units as a means of providing lower-cost overnight visitor accommodations while continuing to prevent conditions leading to



Montero Avenue Beach

increase demand for City services and adverse impacts in residential areas and coastal resources.

- 2.3.3-7. Permit limited-use overnight visitor accommodations on the hotel resort property located at 1107 Jamboree Road where such accommodations are provided together with traditional overnight, hotel visitor accommodations and which shall be subject to specific restrictions, including on: quantity (no less than 391 units shall be traditional hotel units available for transient overnight use by the general public year round and no more than 88 of the total 479 units planned may be limited-use overnight visitor accommodations), duration of owner use of such facilities (maximum use of 90 days per calendar year with a maximum of 29 days of use during any 60 day period), management of the units as part of the hotel facility and allowance for transient overnight use by the general public when not owner occupied; all of which shall be further defined in the regulations for this land use plan (when such regulations are certified) and through the coastal development permit process.
- **2.3.3-8.** A method to define whether a facility providing overnight accommodations is low, moderate, or high cost for the City of

Newport Beach coastal zone shall be developed in the implementing regulations for this land use plan (when such regulations are certified) and through the coastal development permit process.

2.4 Coastal-dependent/related Development

Coastal Act policies related to coastal-dependent and coastal-related development that are relevant to Newport Beach include the following:

30255. Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.

2.4.1 Commercial

Newport Harbor supports a wide range of coastal-dependent and coastal-related commercial uses. These include passenger/sightseeing boats, passenger-fishing boats, boat rentals and sales, recreational equipment rentals, entertainment boats, boat/ship repair and maintenance, and harbor maintenance facilities. These uses play an important role in the character of the harbor and provide the services necessary to sustain one of the world's great small boat harbors.

Coastal-dependent/-related

Coastal-dependent refers to a development or use that requires a site on, or adjacent to, the sea to be able to function at all. Coastal-related refers to a development or use that is dependent on a coastal-dependent development or use.



Basin Marine Shipyard

Over the past 20 years, a number of marine-related businesses and industries in Newport Beach have moved to inland areas. This is reflective of a regional trend, largely due to increased environmental regulation in California affecting fiberglass manufacturing processes, as well as real estate price inflation in coastal communities.

The Recreational and Marine Commercial (CM) land use category is the primary method of providing for the continuation of coastal-dependent and coastal-related commercial uses

on or near the bay. The CM designation is applied to areas that have historically provided marine-related businesses and industries and visitor-serving and recreational areas. CM uses are also permitted in the Mixed Use (MU-V, MU-H, and MU-W) land use categories located on or near the bay to encourage the continuation

of coastal-dependent and coastal-related uses, as well as allow for the integrated development of residential.

- **2.4.1-1.** Give priority to coastal-dependent uses over other uses on or near the shoreline.
- **2.4.1-2.** When appropriate, accommodate coastal-related developments within reasonable proximity to the coastal-dependent uses they support.
- 2.4.1-3. Discourage re-use of properties that result in the reduction of coastal-dependent commercial uses. Allow the re-use of properties that assure coastal-dependent uses remain, especially in those areas with adequate infrastructure and parcels suitable for redevelopment as an integrated project.
- 2.4.1-4. Design and site new development to avoid impacts to existing coastal-dependent and coastal-related developments. When reviewing proposals for land use changes, give full consideration to the impact on coastal-dependent and coastal-related land uses including not only the proposed change on the subject property, but also the potential to limit existing coastal-dependent and coastal-related land uses on adjacent properties.
- 2.4.1-5. Maintain the Recreational and Marine Commercial (CM) land use category and allow CM uses in the Mixed Use land use categories (MU-V, MU-H, and MU-W) in areas on or near the bay to encourage a continuation of coastal-dependent and coastal-related uses.
- 2.4.1-6. Protect and encourage facilities that serve marine-related businesses and industries unless present and foreseeable future demand for such facilities is already adequately provided for in the area. Encourage coastal-dependent industrial facilities to locate or expand within existing sites and allowed reasonable long-term growth.

2.4.2 Public Facilities

Lands designated for public facilities that are on or adjacent to the shoreline are primarily used for public parking, public safety facilities, and educational facilities. These include coastal-dependent/related institutional uses, such as the Orange Coast College David A. Grant Collegiate Rowing Center, the Sea Scout Base, and the Kerckhoff Marine Laboratory.



Kerckhoff Marine Laboratory in Corona del Mar

Policy 2.4.2-1. Continue to designate lands for coastal-dependent/related educational and recreational uses.

2.5 Tidelands and Submerged Lands

Coastal Act policies related to tidelands and submerged lands that are relevant to Newport Beach include the following:

30213. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

30221. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

30223. Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

2.5.1 The Tidelands Trust



Balboa Yacht Basin

Tidelands and submerged lands are subject to a public trust that, among other things, limits their use to navigation, fishing, commerce, public water-oriented recreation, access. and environmental open space protection. Tidelands and submerged lands within the corporate limits of Newport Beach are, with very limited exceptions, owned by the State. The majority of tidelands vast submerged lands in Newport Beach have been granted to the City or the County of Orange to administer in a manner consistent with the public

trust limitations relative to use of the property and revenue derived from that use. The tideland boundary in Newport Harbor has been, for virtually all of the properties, established by court judgments stemming from a series of lawsuits filed in the 1920's and 1930's. Newport Beach tidelands also include large portions of the City's ocean beaches and land covered by the Pacific Ocean from the shoreline three miles out to sea and between the Santa Ana River and the east end of the Cameo Shores tract.

2.5.2 Tidelands Leases

Chapter 494 of the Statutes of 1919 granted to the City of Newport Beach all tidelands and submerged lands that were within its corporate limits at that time. Additional tidelands were granted by Chapter 70 of the Statutes of 1927. These tidelands and submerged lands consist primarily of the land bayward of the bulkhead and portions of bay beaches in the Lower Bay. The Beacon Bay Bill (Chapter 74,

Statutes of 1978) regranted to the City of Newport Beach all tidelands and submerged lands that were within its corporate limits on July 25, 1919. The Beacon Bay Bill established limitations on the use of tidelands and submerged lands to those in which there is a general statewide purpose, including the establishment, improvement and conduct of a public harbor, recreational facilities open to the public, and the preservation and enhancement of the lands in their natural state. The Beacon Bay Bill also modified some of the public trust restrictions on certain properties, such as portions of Beacon Bay and the Balboa Bay Club, subject to a requirement that revenue generated by these properties be used for public trust purposes.

Beacon Bay

Beacon Bay refers to an area located between Promontory Bay and the Balboa Island Channel. This area was tidelands that were filled and reclaimed in the 1920s as the result of an improvement plan, which included the development of a harbor facility that would become the Balboa Yacht Basin. Chapter 200 of the Statutes of 1931 allowed the area west of the Balboa Yacht Basin (designated as Beacon Bay) to be leased for residential purposes. 72-unit residential subdivision was developed in the 1930s. which



Public beach at Beacon Bay

included 35 homes located on approximately 4 acres of State tidelands.

As indicated above, the Beacon Bay Bill released the residential lots of Beacon Bay located within State tidelands from the public trust land use limitations and allows existing leases to continue. These leases are limited to terms not to exceed 50 years and lease revenues have to be deposited into tidelands trust funds. Senate Bill 573 (Chapter 317, Statutes of 1997) revised the Beacon Bay Bill to require the residential lease revenue be deposited into specific tidelands trust funds. The current lease runs to June 27, 2043.

In Fiscal Year 2002-03, the City of Newport Beach received over \$729,000 in lease revenues from Beacon Bay, which were deposited in tidelands trust funds and State Lands Commission Land Bank Fund.

Balboa Bay Club



Bayfront walkway at the Balboa Bay Club and Resort

The Balboa Bay Club and Resort is on approximately 12.6 acres of State tidelands held in trust by the City of Newport Beach and leased to the Balboa Bay Club, Inc. The property is located on the south side of the 1200 block of West Coast Highway and was filled and reclaimed in the 1920s as part of a public project to develop the Lower Bay as a harbor. The property is currently developed with a 132-room resort hotel, restaurant, spa, private club facilities, and 144-unit apartment complex. The State Lands Commission has determined that the

use of tidelands for private residential purposes is in conflict with the public trust limitations on use. This conflict was first addressed in the Beacon Bay Bill (Chapter 74 of the Statutes of 1978) and later in Assembly Bill 3139 (Chapter 728, Statutes of 1994). AB 3139 recognized that the lease of the apartment complex (identified as Parcel D) for residential purposes provides fiscal and economic benefits to the public trust and a means of improving public access. Under the provisions of AB 3139, lease revenues are placed in tidelands trust funds to provide facilities and services that directly support public use of tidelands and submerged lands. Income from the apartments provides an income stream that allowed the lessee to finance the redevelopment of the club to transition it from a private membership facility to visitor-serving commercial land uses. AB 3139 therefore allows Parcel D to be leased for residential purposes until no later than December 31, 2044.

In Fiscal Year 2002-03, the City of Newport Beach received over \$1,870,000 in lease revenues from Parcel D, which were deposited in tidelands trust funds and State Lands Commission Land Bank Fund. The redevelopment of the Balboa Bay Club was completed in 2003 and provides public access to the hotel, restaurant, spa, the main parking lot, and a public walkway to and along the bulkhead.

Harbor Island

Developed in 1926, Harbor Island is a 35-lot single-family community on a private island located between Linda Isle and Collins Island. Portions of tidelands surrounding Harbor Island have been filled or reclaimed and are no longer submerged or below the mean high tide line. Harbor Island residents have improved these lands with landscaping and other improvements. The State, through the adoption of Chapter 715, Statutes of 1984, found that these lands are generally inaccessible to the public and, in their present condition, are not suitable for public trust uses. Both the County of Orange (most of the subject lands are County tidelands) and City of Newport Beach are authorized to allow the Harbor Island tidelands to be used for non-permanent recreational and landscaping uses. These leases are limited to terms of 49 years or less and lease revenues have to be deposited into tidelands trust funds.

- 2.5.2-1. Administer the use of tidelands and submerged lands in a manner consistent with the tidelands trust and all applicable laws, including Chapter 70 of the Statutes of 1927, the Beacon Bay Bill (Chapter 74, Statutes of 1978), SB 573 (Chapter 317, Statutes of 1997), AB 3139 (Chapter 728, Statutes of 1994), and Chapter 715, Statutes of 1984 and the Coastal Act.
- **2.5.2-2.** Promote the public's right of access to the ocean, beach, and bay and to the provision of coastal-dependent uses adjacent to the water in the leasing or re-leasing of publicly owned land.
- **2.5.2-3.** Evaluate and ensure the consistency of the proposed use with the public trust restrictions and the public interest at the time any tideland lease is re-negotiated or renewed.
- **2.5.2-4.** Negotiate or renegotiate tidelands leases at the fair market value based on the uses authorized in the lease and use the funds as required by law or the public trust.
- **2.5.2-5.** Require public access in a manner consistent with the policies of the Coastal Act and this LCP when the City issues new leases of public land, or renew existing leases. This requirement shall be understood to apply to all other public leaseholds in the coastal zone, including beaches leased to the Lido Isle Association.

2.6 Industrial Development

Coastal Act policies related to industrial development that are relevant to Newport Beach include the following:

30250 (b) Where feasible, new hazardous industrial development shall be located away from existing developed areas.

30260. Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

30262. Oil and gas development shall be permitted in accordance with Section 30260,...

None of the City's industrial areas are located within the coastal zone. However, portions of Cannery Village (SP-3) are designated for a mixture of general commercial and light industrial uses to encourage marine-related business.

When Newport Beach adopted its charter in 1954, oil and gas exploration, drilling, production, and refining was banned in the City. However, one oil field operation existed prior to the ban. The Newport Oil Field is located in the western portion of



Commercial and light industrial uses in Cannery Village

Newport Beach. The field was divided into two areas known as the Cagney and Beach areas. The Beach Area discovery well was drilled in 1922 and discovery well in the Cagney Area was drilled in 1947. The Beach Area has been abandoned, but there were still 3 gas-producing wells in the Cagney Area.

Oil and gas operations are also conducted throughout the County portion of the Banning Ranch property (West Newport Oil Field) pursuant to California Coastal Commission Exemption E-144. Banning Ranch is a deferred certification area due to unresolved issues relating to land use, the future of the oil and gas operations, and the protection of the coastal resources on the property (see Section 2.2.4).

The City of Newport Beach and other coastal communities in Southern California have long opposed the federal government's offshore oil leasing programs. Newport Beach residents and visitors rely heavily on the bay and oceanfront beaches for recreation, and much of the City's economy is based upon its natural resources. Development of offshore tracts creates visual impacts and poses the threat of significant oil spills and resulting environmental damage.

Policies:

- 2.6-1. In the areas designated for industrial land uses, give priority to coastal-dependent and coastal-related industrial uses over other industrial uses on or near the shoreline.
- 2.6-2. Continue to monitor the federal government's offshore oil leasing programs to insure the City and its citizens are fully aware of all proposed offshore activities, which could adversely affect the coastal environment, including participation in the other similar programs.



West Newport Oil Field operations

including participation in the Local Government Coordination Program or

- **2.6-3.** Oppose and lobby against proposed lease sales off the coast of Orange County and elsewhere in the Southern California region, which could adversely affect the environment or the economy of the City of Newport Beach.
- **2.6-4.** Assist jurisdictions in other areas of the state that are opposed to offshore lease sale programs in their vicinity.
- **2.6-5.** Where feasible, locate new hazardous industrial development away from existing developed areas.
- **2.6-6.** Encourage coastal-dependent industrial facilities to locate or expand within existing sites and permit reasonable long-term growth where consistent with the Coastal Land Use Plan.

2.7 Residential Development

Coastal Act policies related to residential development that are relevant to Newport Beach include the following:

30007. Nothing in this division shall exempt local governments from meeting the requirements of state and federal law with respect to providing low-and moderate-income housing, replacement housing, relocation benefits, or any other obligation related to housing imposed by existing law or any law hereafter enacted.

30222. The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

Newport Beach has a wide variety of residential development types in the coastal zone, ranging from low-density single-family detached subdivisions to high-density high-rise condominiums. Most of the residential areas in the coastal zone were originally subdivided in the early 20th Century, with many developments marketed as vacation home sites. This established the grid system of small lots and narrow streets and alleys that still exists today. These subdivision characteristics and the development of two-family and multi-family development have resulted in relatively high residential densities in Newport Beach's coastal neighborhoods.

Coastal zone residential areas are almost completely built out, with the exception of the Banning Ranch area (see Section 2.2.4). Most residential building activity consists of remodeling and/or the total reconstruction of existing dwelling units. Newport Beach's proximity to major employment markets and its desirable coastal setting have led to steadily increasing land costs. In 2001, Newport Beach was one of the ten California communities with the highest median home prices. This high market demand is manifest in a number of development issues facing the City, including development on odd-shaped or physically constrained properties, trends towards larger dwelling units, and proposals to allow residential development in commercial areas.

Hundreds of dwelling units in coastal zone residential areas are rented for 30 days or less. The vast majority of these rentals occur during the summer when the demand for parking and City services is greatest. Overcrowding and public nuisances associated with these short-term rentals have resulted in adverse impacts to residential areas, coastal access, and coastal resources. Since 1992, the City has required short-term lodging permits to assist in controlling overcrowding and unruly behavior. Short-term lodging permits require the owner of the short-term rental to agree to limit overnight occupancy of the unit to a specific number of occupants not exceeding that permitted by the Building Code. Short-term rental owners are also required to use best efforts to insure that the occupants and guests are law abiding, do not create unreasonable noise or disturbances, or engage in disorderly conduct. Short-term rental owners are also required to use best efforts to insure compliance

with all health and sanitation regulations.

Illegal or "bootleg" dwelling units exist in Newport Beach, experienced most often in the older, beach-oriented areas of West Newport, Balboa Peninsula, Balboa Island and Corona del Mar. These units are found in two typical forms: "splitting" of a single dwelling unit into two separate occupancies. and the conversion of garages to living space. These units usually have a number of health and safety code violations, due to conversion without proper building permits and inspections. Associated overcrowding. traffic congestion, and



West Newport homes

illegal vehicle parking have also resulted in adverse impacts to residential areas and coastal resources. Illegal dwelling units are less prevalent than in the past, due to increased year-round owner occupancy in these areas and Report of Residential Building Records inspections that occur when properties are sold. A Report of Residential Building Records is a report issued by the City describing the zoning of the residential building, the number of dwelling units permitted pursuant to the zoning classification, and other information relevant to the use, occupancy and construction of the residential building.

- **2.7-1.** Continue to maintain appropriate setbacks and density, floor area, and height limits for residential development to protect the character of established neighborhoods and to protect coastal access and coastal resources.
- **2.7-2.** Continue the administration of provisions of State law relative to the demolition, conversion and construction of low and moderate-income dwelling units within the coastal zone.
- **2.7-3.** Continue to authorize short-term rental of dwelling units pursuant to permits and standard conditions that ensure the rentals will not interfere with public access and enjoyment of coastal resources.
- **2.7-4.** Continue to require Report of Residential Building Records inspections prior to the sale of residential properties to reduce and prevent violations of building and zoning codes by providing prospective owners of residential property with information as to permitted and illegal uses and construction.

2.8 Hazards and Protective Devices

Coastal Act policies related to hazards and protective devices that are relevant to Newport Beach include the following:

30235. Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.

30253. New development shall:

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.
- (3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.
- (4) Minimize energy consumption and vehicle miles traveled.
- (5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.

30236. Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

2.8.1 General

Newport Beach is susceptible to hazards, including, storm surges, beach and bluff erosion, landslides and slope failure, and wildland fires. Newport Beach is also susceptible to low-probability but high-risk events like earthquakes and tsunamis. It is the mandate of the Coastal Act to reduce potential risks to life and property and to avoid substantial alteration of natural landforms. In reviewing coastal development permits, the emphasis needs to be placed on siting and designing new development to avoid hazardous areas rather than relying on protective devices.

- **2.8.1-1.** Review all applications for new development to determine potential threats from coastal and other hazards.
- **2.8.1-2.** Design and site new development to avoid hazardous areas and minimize risks to life and property from coastal and other hazards.

- **2.8.1-3.** Design land divisions, including lot line adjustments, to avoid hazardous areas and minimize risks to life and property from coastal and other hazards.
- **2.8.1-4.** Require new development to assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

2.8.2 Tsunamis and Rogue Waves

Tsunamis

A tsunami is a sea wave caused by any large-scale disturbance of the ocean floor that occurs in a short period of time and causes a sudden displacement of water. Tsunamis can travel across the entire Pacific Ocean basin, or they can be local. Large-scale tsunamis are not single waves, but rather a long train of waves. The most frequent causes of tsunamis are shallow underwater earthquakes and submarine landslides; however, underwater volcanic explosions, oceanic meteor impacts, and even underwater nuclear explosions can also cause tsunamis. The highest elevation that the water reaches as it runs up on the land is referred to as wave runup, uprush, or inundation height. Inundation refers to the horizontal distance that a tsunami wave penetrates inland.

The historical tsunami record for California suggests that the tsunami hazard in the Southern California region, from the Palos Verdes Peninsula south to San Diego, is moderate. However, the Southern California historical record is very short and it is possible that Southern California has been impacted by tsunamis for which there is no record. More significantly, there are several active faults immediately offshore of the Southern California area, and any of these could generate a future earthquake that could have a tsunami associated with it. Finally, several submarine landslides and landslide-susceptible areas have been mapped offshore, within 3.5 to 14 km (2.2 8.7 mi) to of the coastline. For the Orange County coastline particularly, near-shore tsunamis should be considered worst-case scenarios, as these have the potential to cause high runups that would impact the coastline with almost no warning.

The Channel Islands and Point Arguello protect Newport Beach from most distantly generated tsunamis (teletsunamis) spawned in the Pacific Ocean, except for those generated in the Aleutian Islands, off the coast of Chile, and possibly off the coast of Central America. Nevertheless, since the early 1800's, more than 30 tsunamis have been recorded in Southern California, and at least six of these caused damage in the area, although not necessarily in Newport Beach. Tsunamis generated in the

Alaskan region take approximately 6 hours to make it to the Southern California area, while tsunamis generated off the Chilean coast take 12 to 15 hours to reach Southern California. Given those time frames, coastal communities in Southern California can receive adequate warning, allowing them to implement evacuation procedures. Alternatively, very little warning time, if any, can be expected from locally generated tsunamis. Locally generated tsunamis caused by offshore faulting or landsliding (including earthquake-induced landsliding) immediately offshore from Newport Beach are possible, and these tsunamis have the potential to be worst-case scenarios for the coastal communities in Orange County. Modeling off the Santa Barbara coast suggests that locally generated tsunamis can cause waves between 2 and 20 m (6 to 60 feet) high, and that these could impact the coastline with almost no warning, within minutes of the causative earthquake or slump.

The tsunami inundation maps were prepared based on several sea water levels scenarios for 100- and 500-year tsunamis. The findings are summarized below:

<u>Tsunami Inundation at Mean Sea Level</u>. In this scenario, Newport Bay and most of the harbor would be inundated with the potential to damage small vessels and docks. Some of the properties adjacent to the Bay would also be impacted, especially the northwestern section of Balboa Island, which is predicted to be inundated. The water level in Upper Newport Bay is anticipated to rise some but the data available are insufficient to quantify the hazard in this area.

<u>Tsunami Inundation at Mean High Water</u>. In this scenario, Most of the harbor area, including the inland, developed portion of the Balboa Peninsula, Balboa Island, and Upper Newport Bay could be inundated during such an event. Near-shore sections of Lido Isle and Linda Isle would also be impacted, and Lido Isle would be cut off from the mainland due to flooding along Newport Boulevard and 32nd Street. This scenario is expected to cause considerable damage to homes in the low-lying areas and to all moored boats.

Tsunami Inundation at Extreme High Tide. In this scenario, a significant portion of Newport Harbor and the low-lying areas south of Coast Highway would be inundated by both the 100- and 500-year wave runups. The 100-year event shows that except for a small sliver of Lido Isle, the entire Newport Bay area would flood. Flooding is also anticipated in the area where Newport Dunes Resort is located. In the 500-year event, all of Lido Isle is expected to flood. The probability of a tsunami occurring during extreme high tide is highly improbable and represents the worst-case scenario. However, these tsunami runups are possible if a tsunami occurs immediately offshore of Newport Beach, whether as a result of faulting or landsliding. Roque Waves

Rogue waves are very high waves, as much as tens of meters high, but compared to tsunamis, they are very short from one crest to the next, typically less than 2 km (1.25 mi) long. Rogue waves arise unexpectedly in the open ocean and their generating mechanism is a source of controversy and active research. Some theories on rogue wave formation include:

- Strong currents that interact with existing swells making the swells much higher;
- A statistical aberration that occurs when a number of waves just happen to be in the same place at the same time, combining to make one big wave;
- The result of a storm in the ocean where the wind causes the water surface to be rough and choppy, creating very large waves.

Rogue waves are unpredictable and therefore making planning nearly impossible. Nevertheless, some high waves that have historically impacted the Orange County coastline may be best explained as rogue waves. If this is the case, rogue waves have the potential to impact the Newport Beach area in the future.

- **2.8.2-1.** Review local and distant tsunami inundation maps for Newport Beach and adjacent coastal communities as they are developed to identify susceptible areas and plan evacuation routes.
- **2.8.2-2.** Periodically review and update tsunami preparation and response policies/practices to reflect current inundation maps and design standards.
- **2.8.2-3.** Participate in any regional effort to develop and implement workable response plans that the City's emergency services can adopt immediately for evacuation in the case of a tsunami warning.
- **2.8.2-4.** Prepare and deploy a system of tsunami detection and early warning systems.
- 2.8.2-5. Include tsunami evacuation route information as part of any overall evacuation route sign program implemented in the City. Evacuation routes off of the peninsula and islands in the Bay should be clearly posted. An evacuation route traffic monitoring system that provides real-time information on the traffic flow at critical roadways should be considered.

- **2.8.2-6.** Continue projects like the Surfside-Sunset/West Newport Beach Replenishment program to maintain beach width. Wide beaches provide critical protection against tsunami runup for structures along the oceanfront.
- **2.8.2-7.** Develop and implement a tsunami educational program for residents, visitors, and people who work in the susceptible areas.
- **2.8.2-8.** Require overnight visitor-serving facilities in susceptible areas to provide tsunami information and evacuation plans.
- **2.8.2-9.** Encourage the Newport-Mesa School District to include in their earthquake-preparedness curriculum information specifically related to the natural hazards that Newport Beach's citizens could face, and what to do about them.
- **2.8.2-10.** Support tsunami research in the Newport Beach offshore and Newport Bay areas.

2.8.3 Storm Surges and Seiches

Two common coastal flooding processes include storm surges and seiches.

Storm Surges

A storm surge is an abnormal rise in sea water level associated with hurricanes and other storms at sea. Surges result from strong on-shore winds and/or intense low-pressure cells associated with ocean storms. Water level is controlled by wind. atmospheric pressure, existing astronomical tide, waves and swell, local coastal topography and bathymetry, and the storm's proximity to the coast.

Most often, destruction by storm surge is attributable to:



Storm berm at The Wedge

- Wave impact and the physical shock on objects associated with the passing of the wave front. The water may lift and carry objects to different locations.
- Direct impact of waves on fixed structures. This tends to cause most of the damage.
- Indirect impacts, such as flooding and the undermining of major infrastructure (such as highways and railroads).

Storm surges affect primarily ocean front property, and the low-lying areas of Newport Bay just inland from the jetties. Newport Bay is less affected by storm surge. Unlike tsunamis, which can occur anytime, storm surges are associated with bad weather. Given that during bad weather fewer people are expected to be at the beach, storm surges are more likely to impact residents than tourists, and the potential number of casualties can be expected to be significantly less.



Balboa Peninsula houses destroyed by storm surge from the 1939 tropical storm

The most common problem associated with storm surges is flooding of low-lying areas, including structures. Coastal flooding in Newport Beach occurred in the past when major storms, many of these ENSO (El Niño Southern Oscillation) events, impacted the area. This is often compounded by intense rainfall and strong winds. If a storm surge occurs during high tide, the flooded area can be significant. In the Southern California area, including Newport Beach, localized flooding and accelerated rates of coastal erosion have occurred when storms are

combined with high tides. This occurred during the 1977-1978 storms, when the combination of high waves, local storm surges and high tides damaged several coastal structures in southern California. During the storms in 1988, the high water extended to the first row of houses behind the groin field at Newport Beach causing minor flood damage to these structures. Storm surging associated with a tropical storm has been reported only once in the history of Newport Beach, in 1939. This suggests that the hazard of cyclone-induced storm surges has a low probability of occurrence. Nevertheless, the one incident in 1939 caused millions of dollars in damage to Newport Beach.

Seiches

A seiche is defined as a standing wave oscillation in an enclosed or semi-enclosed, shallow to moderately shallow water body or basin, such as lake, reservoir, bay or harbor. Seiches continue (in a pendulum fashion) after the cessation of the originating force, which can be tidal action, wind action, or a seismic event. Seiches are often described by the period of the waves (how quickly the waves repeat themselves), since the period will often determine whether or not adjoining structures will be damaged. The period of a seiche varies depending on the dimensions of the basin. Whether an earthquake will create seiches depends upon a number of earthquake-specific parameters, including the earthquake location (a distant earthquake is more likely to generate a seiche than a local earthquake), the style of fault rupture (e.g., dip-slip or strike-slip), and on the configuration (length, width and depth) of the basin.

Amplitudes of seiche waves associated with earthquake ground motion are typically less than 0.5 m (1.6 feet high), although some have exceeded 2 m (6.6 ft). A seiche in Hebgen Reservoir, caused by an earthquake in 1959 near Yellowstone National Park, repeatedly overtopped the dam, causing considerable damage to the dam and its spillway. The 1964 Alaska earthquake produced seiche waves 0.3 m (1 ft) high in the Grand Coulee Dam reservoir, and seiches of similar magnitude in fourteen bodies of water in the state of Washington.

Upper Newport Bay, the harbor and some of the reservoirs in Newport Beach could be susceptible to seiches. However, there is no record of seiches impacting the area after both local and distant earthquakes. Wind-generated seiches in Newport Bay also have not been reported. Due to the small surface area of Newport Bay and Upper Newport Bay, the probability that damaging seiches would develop in these bodies of water is considered low and are not considered a significant hazard in Newport Beach. If a seiche developed in Newport Bay, the waves are expected to be low, impacting primarily moored boats.

Policies:

2.8.3-1. Require all coastal development permit applications for new development on a beach or on a coastal bluff property subject to wave action to assess the potential for flooding or damage from waves, storm surge, or seiches, through a wave uprush and impact reports prepared by a licensed civil engineer with expertise in coastal processes. The conditions that shall be considered in a wave uprush study are: a seasonally eroded beach combined with long-term (75 years) erosion; high tide conditions, combined with long-term (75

year) projections for sea level rise; storm waves from a 100-year event or a storm that compares to the 1982/83 El Niño event.

- **2.8.3-2.** Prepare and periodically update (every 5 years) comprehensive wave uprush and impact reports for shoreline and coastal bluff areas subject to wave action that will be made available to applicants for new development on a beach or coastal bluff property for use in fulfilling the requirement of Policy 2.8.3-1 above.
- 2.8.3-3. Develop and implement shoreline management plans for shoreline areas subject to wave hazards and erosion. Shoreline management plans should provide for the protection of existing development, public improvements, coastal access, public opportunities for coastal recreation, and coastal resources. Plans must evaluate the feasibility of hazard avoidance, restoration of the sand supply, beach nourishment and planned retreat.
- **2.8.3-4.** Continue to utilize temporary sand dunes in shoreline areas to protect buildings and infrastructure from wave uprush, while minimizing significant impacts to coastal access and resources.
- **2.8.3-5.** Encourage the use of sand dunes with native vegetation as a protective device in beach areas.
- **2.8.3-6.** Encourage the use of non-structural methods, such as dune restoration and sand nourishment, as alternatives to shoreline protective structures.

2.8.4 Hurricanes and Tropical Storms

Most hurricanes that affect the southern California region are generated in the southern portion of the Gulf of California. Though no hurricane-strength storms have reportedly hit the Los Angeles basin area in modern times, damage from wave swell and weather related to hurricanes that develop in the Baja California area has been reported throughout southern California. Swells caused by offshore storms and hurricanes in Baja California can cause localized flooding and erosion of the southern California coastline. Only one tropical-strength storm has ever been recorded as actually hitting California. Near the end of September 1939, a tropical storm with sustained winds of 80.5 km/hr (50 mi/hr) came ashore at Long Beach. The storm generated five inches of rain in the Los Angeles basin on September 25th, and between 15 and 30.5 cm (6 and 12 inches) of rain in the surrounding mountains. In Newport Beach, this storm produced 30-foot high waves (as high as a three-story building) that tore away half of Newport Pier and destroyed most of Balboa Pier,

damaged portions of the jetties, several homes and small vessels, and caused numerous drownings. Other less severe but still significant storms that impacted the southern California coastline occurred during 1927, 1938-1939, 1941, 1969, 1977-1978, 1983, 1988 and even more recently in 1995, and 1997-1998. Many of these wet winters have been associated with ENSO (El Niño Southern Oscillation) events.

The main hazards associated with tropical cyclones, and especially hurricanes, are storm surge, high winds, heavy rain, flooding, and tornadoes. The greatest potential for loss of life related to a hurricane for coastal communities is from the storm surge, which if combined with normal tides can increase the mean water level by 4.6 m (15 ft) or more. Waves that high would breach or extend over the Balboa Peninsula and impact all development adjacent to the coastline, including areas along Corona del Mar.



Half the Newport Pier was destroyed by heavy surf from the 1939 tropical storm

2.8.5 Sea Level Rise

The level of the oceans has always fluctuated with changes in global temperatures. The last ice age ended approximately eighteen thousand years ago, and since then the world has been experiencing global warming - most of the ice caps have melted, most of the glaciers have retreated, and the sea level has risen. Until about 5,000 years ago, sea level rose rapidly at an average rate of nearly 0.4 in (1 cm) a year. Since then, sea levels have continued to rise but at a slower pace. We are currently in an interglacial period, meaning "between glacial" periods, and as a result, sea levels are relatively high. However, during the last major interglacial period (approximately 100,000 years ago), temperatures were about 1°C (2°F) warmer than today and sea level was approximately 6 meters (20 feet) higher than today.

Global sea level trends, therefore, have generally been estimated by combining the trends at tidal stations around the world. These records suggest that during the last century, worldwide sea level has risen 10 to 25 cm (4 to 10 inches), much of which has been attributed to global warming. Although sea level rise by itself does not cause substantial changes in the landform, several processes associated with sea level rise can have dramatic effects on our environment. For example, a significant rise in sea level would inundate coastal wetlands and lowlands, and the increased surges and swells associated with this rise in sea level would accelerate coastal

erosion and exacerbate coastal flooding, thereby threatening local structures and habitat. Other related processes include higher water tables, increased sea-water intrusion into fresh water aquifers, and increased salinity of rivers, bays, and aquifers. The warmer climate may also result in a much higher probability of extremely warm years with increased precipitation in some areas, and drought in other areas. It is clear that global changes in climate will occur, but the local impacts are still being debated. In fact, recent studies have moved away from the global doomsday predictions to predictions at the local scale. Much work yet needs to be done in this area.

Previous studies suggest that a 1 m (39 in) rise in sea level would generally cause beaches to erode 200 to 400 m (650 to 1,300 ft) along the California coast. Given that the width of the beaches in Newport Beach varies between 15 and 190 m (50 and 600 ft), a sea level rise of as little as 15 cm (6 in) could have a negative impact on the low lying areas around Newport Bay that are not protected by bulkheads and seawalls. Sea level rise would also cause increased sea-cliff retreat in the southern portion of the City where the beaches are narrow, and the surf pounds at the base of the bluffs, eroding away the soft bedrock that forms the cliffs.

The record of sea level rise in the last century is poorly constrained in this region, however. Gauge records up and down the Pacific Coast show substantial variations in relative sea level rise. Based on the historical records from the two gauges closest to Newport Beach, in Los Angeles and San Diego, a 15-cm rise in sea level in the Newport Beach area may take anywhere between 70 and 180 years, assuming that global warming does not accelerate in the next few decades. These estimates are too poorly constrained to engender policy changes and development of appropriate mitigation strategies. However, sea level rise would lead to the permanent inundation of low-lying areas, with potentially significant changes in land use, so it is not too soon to develop longer-term strategies that can be implemented to cope with these changes.

2.8.6 Coastal Erosion

Beach Erosion

Both natural processes and humans have modified the Newport Beach coastline extensively for over the past 180 years. The Balboa Peninsula did not begin to form until 1825. The wide sandy beaches that we associate with West Newport Beach are actually the result of shoreline stabilization programs that began as early as the 1920's, and beach sand nourishment programs that began in earnest in the 1960's. The "natural" beaches that characterized the southern California coastline prior to significant anthropogenic intervention were narrow strips of dry beaches on a sand-

starved coast. These beaches would be unable to support the present-day demands for coastal access and recreation.

In an undeveloped area, the availability of sand to replenish the beaches is dependent on floodwaters that bring sediment down from the mountains and into the littoral drift zone offshore. However, with the increase in dams and other flood control structures upstream, significantly less quantities of sediment reach the coast. Therefore, the sediments lost by natural near-shore processes are not being replaced. This is certainly the case in southern California, where most of the major streams have been dammed, or are lined in concrete, significantly reducing their sediment load. In the Newport Beach area, sand was historically delivered to the local beaches by the San Gabriel and Santa Ana Rivers, and to a limited extent, as a result of coastal bluff erosion. With the construction of dams and channelization of portions of the Santa Ana and San Gabriel Rivers, there was a substantial reduction in the volume of sediment reaching the coastline. Construction of harbors, jetties, and other coastal barriers further reduced the amount of sand moved by along-shore currents.

Beach sands occur from south of the Santa Ana River to the north entrance to Newport channel. Some of these deposits support dune vegetation, especially the sands forming the Balboa and Newport beaches. When the dune vegetation is well established, erosion of these sediments is minimal. However, foot or vehicular traffic and the burrowing action of rodents can easily compromise the health of this vegetation cover, exposing the nearsurface sediments to erosion. Sand

is easily transported during storms and can erode quickly if up-drift sand sources are cut off.



Beach erosion in West Newport in the late 1960s

The narrow beaches south of the channel entrance are especially vulnerable to high waves caused by tsunamis or storm surge. Beach erosion may be a problem south of the channel entrance due to the impedance of sediment redistribution via longshore flow by seawalls and rocky bluffs to the north. The area north of the jetties is also vulnerable to inundation due to low beach relief and erosion of coastal dunes (see Section 4.1.4 for dune habitat protection).

Bluff Erosion

South of the channel entrance to Newport Bay, to the south of the beach nourishment project area, the coastline is defined by steep coastal bluffs with a narrow basal wavecut platform that is covered by a thin veneer of beach sand. The bluffs form steep cliffs, especially at points. The Newport Beach coastal bluffs consist of siliceous marine shales, marine sandstone, and siltstone of Monterey Formation. sandstone beds are resistant and cliff forming, while the siltstone beds are less resistant and form steep taluscovered slopes.



Erosion of coastal bluffs due to increased water application

The bedrock of the Monterey Formation is folded, and dips primarily to the east, away from the bluff face. Overlying the Monterey Formation are Pleistocene marine terrace deposits. These deposits are massive to crudely bedded, consist of medium to coarse sand with a trace of pebble-sized gravel, and are friable and locally loose. A resistant shell bed marks the base of the terrace deposits.

At the base of the bluffs is a mantle of colluvium. It consists of angular, pebble- to boulder-size clasts of sandstone and siltstone. In some areas, this colluvial cover buries the bluffs almost to the top, and in some areas, the material is reworked and forms a low terrace with weak soil development. The colluvium is heavily vegetated and appears to protect the base of the cliffs against normal wave action.

The elevated 100,000-year old marine terrace deposits are prone to landslides along steep cuts (such as those along Coast Highway) and are susceptible to significant erosion by stream incision, including rilling and gullying along bluff tops. Several streams are cutting through the coastal bluffs, forming steep narrow gorges and undermining the bluffs where they emerge along the coastline. The cap of marine terrace deposits overlying bedrock of the Monterey Formation is heavily rilled along stream cuts and along the face of the bluffs; so it is retreating faster than the underlying bedrock.

The shaley and silty parts of the Monterey Formation is very fissile and fractured. Sliding and slumping of this unit appears to be the primary mechanism for current

bluff retreat, with these processes occurring primarily along slopes that have been oversteepened by wave action (along rocky bluffs) or stream incisions.

The more sandy parts of the Monterey Formation is the most resistant bluff-forming unit in the area. This geologic unit is prone to landsliding or mass wasting where undercut by wave action, especially at rocky bluffs or points, failing primarily as large blocks.

A concern with urbanization of the bluff areas is that the bluff-forming materials become saturated when shallow ground water rises in response to the increased watering of lawns, generally in an attempt to grow non-native vegetation. Agricultural irrigation, septic tanks and leach lines also contribute to the increased water content of these deposits. This over-watering increases the weight of the sediments, lubricates any joints or fractures that can act as planes of weakness, and increases the chemical dissolution of the underling rocks. All of these processes can contribute to slope instability along the bluffs.

Artificial Coastal Protection



Rock groin along Newport Beach

The use of artificial coastal protection structures was favored 30 to 50 years ago, when the groin field in West Newport was constructed. Other structures intended to protect the coast, such as concrete and wooden seawalls and bulkheads, riprap and rock aprons are located in and around Newport Harbor and the adjacent shoreline. However, it has been long observed that where such protective structures extend seaward beyond

adjacent unprotected lots, immediate

erosion and notching may occur down drift, especially during large storms and periods of high tide. As beach sand levels fall, storm waves tend to converge on projecting structures (i.e. groins) and the waves refract toward unprotected areas of the beach. Therefore given that improperly located artificial protective devices can have negative impacts that far outweigh their benefits, beach nourishment has emerged as the preferred method of shoreline stabilization in recent decades.

Structures built perpendicular to the shoreline tend to slow the long-shore drift of sediments and thus starve the down-drift area of beach-nourishing sediments. This is seen on a larger scale with the system of groins in the West Newport. The area

east of the jetties has an erosional notch due to the blockage of littoral drift from the north. On a smaller scale, groins can have the same effect. In the case of West Newport Beach, eight rock groins were installed in the late 1960's and early 1970's to help maintain the beach. The effect of this groin field on the width of the beach is readily apparent (the beach on the northwest side of the groin field is wider than the beach where the groins are located). Southeast of the groin field, sand is being trapped by the west jetty at the harbor entrance, which stabilizes the Balboa Peninsula. The effect of these structures is complemented and augmented by regular beach sand replenishment. The protection of the beaches provides more than just a wider beach for recreational purposes and real-estate development; it serves as a buffer zone that provides protection from tsunami runup or storm surges, especially in areas where there are no dune deposits in front of residential or commercial development.

Erosion stabilization measures that have been implemented in the Corona del Mar area include concrete covering on one unstable slope, vegetation along the tops and bases of bluffs, boulders at the base of bluffs, where no colluvial cover exists, and channelization of the streams to prevent further downcutting of the terrace and bedrock units.

- **2.8.6-1.** Prepare and periodically update comprehensive studies of seasonal and long-term shoreline change, episodic and chronic bluff retreat, flooding, and local changes in sea levels, and other coastal hazard conditions.
- **2.8.6-2.** Continue to monitor beach width and elevations and analyze monitoring data to establish approximate thresholds for when beach erosion or deflation will reach a point that it could expose the backshore development to flooding or damage from storm waves.
- **2.8.6-3.** Develop and implement a comprehensive beach replenishment program to assist in maintaining beach width and elevations. Analyze monitoring data to determine nourishment priorities, and try to use nourishment as shore protection, in lieu of more permanent hard shoreline armoring options.
- **2.8.6-4.** Maintain existing groin fields and jetties and modify as necessary to eliminate or mitigate adverse effects on shoreline processes.
- **2.8.6-5.** Permit revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls and other structures altering natural shoreline

processes or retaining walls when required to serve coastal-dependent uses or to protect existing principal structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply, unless a waiver of future shoreline protection was required by a previous coastal development permit.

- **2.8.6-6.** Design and site protective devices to minimize impacts to coastal resources, minimize alteration of natural shoreline processes, provide for coastal access, minimize visual impacts, and eliminate or mitigate adverse impacts on local shoreline sand supply.
- 2.8.6-7. Discourage shoreline protective devices on public land to protect private property/development. Site and design any such protective devices as far landward as possible. Such protective devices may be considered only after hazard avoidance, restoration of the sand supply, beach nourishment and planned retreat are exhausted as possible alternatives.
- 2.8.6-8. Limit the use of protective devices to the minimum required to protect existing development and prohibit their use to enlarge or expand areas for new development or for new development. "Existing development" for purposes of this policy shall consist only of a principle structure, e.g. residential dwelling, required garage, or second residential unit, and shall not include accessory or ancillary structures such as decks, patios, pools, tennis courts, cabanas, stairs, landscaping etc.
- 2.8.6-9. Require property owners to record a waiver of future shoreline protection for new development during the economic life of the structure (75 years) as a condition of approval of a coastal development permit for new development on a beach, shoreline, or bluff that is subject to wave action, erosion, flooding, landslides, or other hazards associated with development on a beach or bluff. Shoreline protection may be permitted to protect existing structures that were legally constructed prior to the certification of the LCP, unless a waiver of future shoreline protection was required by a previous coastal development permit.
- **2.8.6-10.** Site and design new structures to avoid the need for shoreline and bluff protective devices during the economic life of the structure (75 years).

Note: See Section 4.4.3 for Coastal bluff policies.

2.8.7 Geologic and Seismic

Geologic

The Newport Mesa and San Joaquin Hills areas of the City include slopes that are surficially unstable and can become a problem during intense or sustained rainfall. Many of the geologic units underlying these areas are also easily erodible. Cuts made into these high relief areas may be unstable if planes of weakness are exposed. In addition to posing a hazard to life and property, landslides and slope failure can impact traffic flow along major routes, such as Coast Highway. Mudslides and debris flows also have the potential to impact development at the mouths of canyons and at the base of the hills.

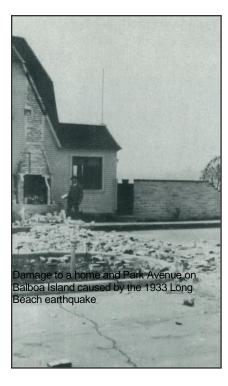
Compressible soils are characteristic of areas underlain by poorly consolidated stream and colluvial deposits. These soils have a moderate to high potential for differential settlement when a large load, such as a building, is applied to them. Compressible soils underlie a significant part of the City. Areas of the City where compressible soils are most likely to occur are active and recently active stream channels, estuary deposits, beach and dune deposits, and young alluvial fan deposits. In the San Joaquin Hills, compressible soils are commonly found in canyon bottoms, swales, and at the base of natural slopes.

Fine-grained soils, such as silts and clays, may contain variable amounts of expansive clay materials. These materials can undergo significant volumetric changes as a result of changes in moisture content. The upward pressure induced by the swelling of expansive soils can have significant harmful effects upon structures and other surface improvements. Thick soil profiles developed on the older marine deposits west of Newport Bay are typically clay-rich and will probably fall in the moderately expansive range. Potentially expansive bedrock may be exposed on natural slopes and ridges in the San Joaquin Hills, or may be uncovered by grading cuts made for developments. Man-made fills can also be expansive, depending on the soils used to construct them.

<u>Seismic</u>

The Newport-Inglewood fault extends across Newport Beach in a northwesterly direction. The southern portion of the City is underlain by the San Joaquin Hills fault, a recently discovered fault that does not extend to the surface but that could have associated, secondary faults at or near the surface. A major earthquake along any of these faults could result in substantial casualties and damage resulting in collapsed buildings, damaged roads and bridges, fires, flooding, and other threats to life and property.

The San Joaquin Hills blind thrust was only discovered in the late 1990s and its geometry and behavior are not well constrained. However, an earthquake on this fault, due to its blind thrust geometry and location has the potential to be more damaging to Newport Beach than rupture of the Newport-Inglewood fault. Typically, earthquakes on



thrust faults produce greater vertical accelerations than comparably sized strike-slip earthquakes (such as one on the Newport-Inglewood fault) and vertical motions are more damaging to structures. Scientists suggest the San Joaquin Hills blind thrust fault could produce a magnitude 6.8 to 7.3 earthquake.

The Newport-Inglewood fault is considered the second most active fault in California. Prior to the discovery of the San Joaquin Hills fault, the Newport-Inglewood fault was thought to pose the greatest threat to Newport Beach because of its close proximity to the City, historic activity, and its recurrence interval. It runs from the City of Inglewood through Newport Beach where it extends out into the Pacific Ocean. This fault is capable of producing earthquakes in the range of 6.3 to 7.5 magnitudes. The 1933, 6.5 magnitude Long Beach earthquake occurred on the Newport-Inglewood fault, causing 120 deaths and severe damage. Unreinforced masonry buildings collapsed leaving people trapped beneath the rubble. Schools collapsed. The Long Beach earthquake epicenter was in the Newport Harbor area of Newport Beach. Buildings were damaged in the City as a result of this earthquake. The low population and development of the time attributed to decreased damage in the Newport Beach area.

The San Andreas fault is located approximately 70 miles northeast of the City. This fault is capable of producing earthquakes in the magnitude 8+ range. Current estimates are that major earthquakes on this fault occur approximately every 145 years. The last major earthquake on the Southern San Andreas fault occurred in 1857.

The Whittier fault is the northern extension of the Elsinore fault and is located approximately 20 miles north of the City. No major historical earthquakes have been attributed to the Whittier fault. However, trenching studies have documented recurrent movement of this fault in the last 17,000 years. The Southern California Earthquake Center determined there is a five percent chance of an earthquake occurring on the Whittier fault by 2024. The Whittier fault is thought capable of producing a magnitude 6.8 maximum magnitude earthquake, although some investigators propose an even larger magnitude 7.1 quake.

In addition to the four fault systems mentioned above, there are several other known potential sources of strong ground shaking within 60 miles of Newport Beach. These include the Peralta Hills, Santa Monica-Hollywood, Puente Hills and Cucamonga faults. These faults could also affect Newport Beach, though not as severely. There are still many uncharted earthquake faults throughout California and several active offshore faults posing possible impacts for Newport Beach.

Poorly consolidated sediments and shallow groundwater underlie portions of Newport Beach, particularly from West Newport to the tip of the Balboa Peninsula and in the areas in and around Newport Bay. These areas have a high susceptibility to liquefaction during earthquakes. Liquefaction is a geologic process that causes various types of ground failure. When liquefaction occurs, the sediments involved have a total or substantial loss of shear strength, and behave like a liquid or semi-viscous substance. Liquefaction can cause structural distress or failure due to ground settlement, a loss of bearing capacity in the foundation soils, and the buoyant rise of buried structures. The excess of hydrostatic pressure generated by ground shaking can result in the formation of sand boils or mud spouts, and/or seepage of water through cracks.

The areas with the liquefaction potential are densely populated and possess considerable commercial property. It is likely that a nearby moderate to strong earthquake will cause extensive damage to buildings and infrastructure. Newport Beach requires the properties in these areas to be built on compacted soils, which should lessen the liquefaction potential.

Other secondary affects of earthquakes include:

Fires. A high probability of fire following an earthquake results from the number of broken gas lines typically occurring during shaking. Water mains and lines often break as well, due to ground movement. The combination of fires and a water shortage seriously complicates the response to earthquakes and their secondary affects.

- Dam Failure. Flooding caused by earthquake induced dam failure of the Prado Dam could impact Newport Beach. However, the probability of flooding due to dam failure is low since the Prado Dam is rarely full. Flooding could also result from the failure of the Big Canyon Reservoir.
- Hazardous Chemical Spills. The north end and west side of the Newport Beach house a large percentage of the City's industries with large quantities of hazardous chemicals. This area would be most affected by hazardous chemical spills and hazardous chemical fires resulting from earthquakes.
- Oil Spills and Pipeline Breakage. Oil fields and oil storage tanks can be seen on the west side of Newport Beach. Although the tanks are diked, a major earthquake could damage the tanks and dikes causing vast amounts of oil spillage. There are numerous underground pipelines traversing the City. An earthquake could easily cause a pipeline breakage, releasing either natural crude oil or refined petroleum products.

- **2.8.7-1.** Conduct hydrological studies of Big Canyon, Buck Gully and Morning Canyon to develop methods to control water quality, sedimentation, erosion, and slope failure and to protect downstream areas from debris flows.
- **2.8.7-2.** Require new development to provide adequate drainage and erosion control facilities that convey site drainage in a non-erosive manner in order to minimize hazards resulting from increased runoff, erosion and other hydrologic impacts to streams.
- 2.8.7-3. Require applications for new development, where applicable [i.e., in areas of known or potential geologic or seismic hazards], to include a geologic/soils/geotechnical study that identifies any geologic hazards affecting the proposed project site, any necessary mitigation measures, and contains a statement that the project site is suitable for the proposed development and that the development will be safe from geologic hazard. Require such reports to be signed by a licensed Certified Engineering Geologist or Geotechnical Engineer and subject to review and approval by the City.
- **2.8.7-4.** Continue to regularly update building and fire codes to reflect the best available standards for seismic safety design.

2.8.8 Fire

Due to its weather, topography and native vegetation, the entire southern California area is at risk from wildland fires. The extended droughts characteristic of California's Mediterranean climate result in large areas of dry vegetation that provide fuel for wildland fires. Furthermore, the native vegetation typically has a high oil content that makes it highly flammable. The area is also intermittently impacted by Santa Ana winds; the hot, dry winds that blow across southern California in the spring and late fall, often igniting and/or spreading fires. Combine these conditions with the fact that more people than ever are living and playing in wildland areas, and the potential for major wildland fires to occur increases even further.



1993 Laguna Canyon fire advancing towards Newport Beach

Fires usually last only a few hours or days, but their effects can last much longer. An intense wildland fire may destroy all the vegetation. The fire also destroys most of the roots that hold the soil in place, allowing running water to wash the soil away. In addition, the organic material in the soil may be burned away or decompose into water-repellent substances that prevent water from percolating into the soil. As a result, even normal rainfall can cause exceptional erosion, flooding and debris flows from a burned area. The 1993 Laguna Canyon wildland fire burned 17,000 acres, destroyed

366 homes, and forced the evacuation of Laguna Beach's 24,000 residents. In 1997, wildland fires charred many areas of southern California, leaving them barren before the next winter's heavy El Niño rainfall. Of the 25 large southern California wildland fires that occurred that year, ten produced debris flows after the first major winter storm, and flooding plagued eight other areas. Only four burn areas showed little erosion or runoff.

Flood control facilities may be severely taxed by the increased flow from the denuded hillsides and the resulting debris that washes down. Recreation areas that have been affected may also be forced to close or operate at a reduced scale. In addition, the buildings that are destroyed by fire are usually eligible for reassessment, which reduces income to local governments from property taxes.

In the aftermath of the 1993 Laguna Canyon fire, Newport Beach fire officials, in cooperation with federal, state, county, and other local officials, began analyzing the conditions that allowed this fire and others to occur. The areas at greatest risk of wildland fires are homes and structures in and around the urban wildland interface

areas. These areas include lower Buck Gully, Morning Canyon, the mouth of Big Canyon, and Spyglass Canyon.

Newport Beach employs two different methods for reducing the risk of fire in these urban wildland interface areas: hazard reduction and fuel modification. Both methodologies use the principle of reducing the amount of combustible fuel available, which reduces the amount of heat, associated flame lengths, and the intensity of the fire that would threaten the adjoining structures. Hazard reduction reduces the amount of fuel within 100 feet of any structure, thus creating a defensible space used to slow the rate and intensity of an advancing wildfire and to create an area for firefighters to suppress the fire and save the structure. Fuel modification zone establishes a ribbon of land surrounding the homes designed to diminish the intensity of a wildfire as it approaches the homes. A fuel modification zone differs from a hazard reduction zone through a combination of methodologies, including the removal of native vegetation replaced with fire resistive plant species, as well as the reduction of amount of native combustible vegetation.

In addition to reduction of the vegetation hazards, areas regulated by fuel modification requirements are also required to "harden" the structures immediately adjacent to the wildland area. This "hardening" is done by providing automatic fire sprinkler protection, installation of class "A" roof assemblies, installation of dual glazed windows, one-hour fire resistive construction on sides of the structure facing the wildland area, and the elimination of any combustible exterior structural elements, such as patio covers.

- **2.8.8-1.** Apply hazard reduction, fuel modification, and other methods to reduce wildfire hazards to existing and new development in urban wildland interface areas.
- **2.8.8-2.** Site and design new development to avoid fire hazards and the need to extend fuel modification zones into sensitive habitats.
- **2.8.8-3.** Use fire-resistive, native plant species from the City-approved plant list in fuel modification zones abutting sensitive habitats.
- **2.8.8-4.** Prohibit invasive ornamental plant species in fuel modification zones abutting sensitive habitats.
- **2.8.8-5.** Continue to maintain a database of parcels in urban wildland interface areas.

- **2.8.8-6.** Continue annual inspections of parcels in the urban wildland interface areas and, if necessary, direct the property owner to bring the property into compliance with fire inspection standards.
- **2.8.8-7.** Continue to regularly update building and fire codes to reflect the best available standards for fire safety design.

2.9 Transportation

Coastal Act policies related to transportation that are relevant to Newport Beach include the following:

30212.5. Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

30252. The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

2.9.1 Public Transit

The City's Transportation Demand Management Ordinance requires new nonresidential developments that are estimated to employ 100 or more employees to reduce the number of peak-period vehicle trips, promote and encourage the use of alternative modes of transportation, and provide support facilities for alternative modes of transportation.

Bus Transportation

Public transportation services in Newport Beach are provided by the Orange County Transportation Authority District (OCTA) and consist of regular fixed-route service. OCTA operates the Newport Beach Transportation Center at Avocado and San Joaquin Hills Road. Demand for bus service from the inland areas to Newport Beach is intensified during the summer peak months. OCTA adds buses to beach routes most in demand to offset the increased load.

The City's Subdivision Code provides for the dedication of transit facilities, such as bus turnouts, benches, shelters and similar facilities, by new development. The City's Public Works Department coordinates with OCTA on the location of transit facilities.



Bus parking area in Balboa Village

Water Transportation



Balboa Island Ferry

The Balboa Island Ferry has been providing ferry service from Balboa Island to the Balboa Peninsula since 1906. Three ferries shuttle automobiles, pedestrians, and bicyclists across the Newport Channel, an average of one thousand people a day.

The 500-passenger Catalina Flyer provides daily passenger service from Newport Beach to Avalon on Catalina Island, transporting an average of 81,700 people each year.

The City supports expanded use of water transportation uses linking the Harbor with other visitor-serving and recreation destinations and providing cross-Harbor service.

- **2.9.1-1.** Continue to implement the Transportation Demand Management Ordinance.
- **2.9.1-2.** Continue to require new development to dedicate transit facilities, such as bus turnouts, benches, shelters and similar facilities, where appropriate.
- **2.9.1-3.** Locate and design larger commercial and residential developments to be served by transit and provide non-automobile circulation to serve new development to the greatest extent possible.
- **2.9.1-4.** Encourage the use of commercial and institutional parking areas for use as public parking during weekends and holidays in conjunction with public transit or shuttles to serve coastal recreational areas.
- **2.9.1-5.** Encourage OCTA to continue and expand summer bus service to coastal recreational areas.
- **2.9.1-6.** Maintain and enhance existing public water transportation services and encourage and provide incentives for expansion of these uses and land support facilities.

- **2.9.1-7.** The City shall study alternative funding mechanisms to provide a low-cost public transportation system to serve beach areas impacted by traffic during summertime, peak-use periods. The City shall address feasible implementation measures for a summertime shuttle or other transit opportunities in the Implementation Plan of the LCP.
- **2.9.1-8.** Employment, retail, and entertainment districts and coastal recreational areas should be well served by public transit and easily accessible to pedestrians and bicyclists. Streets, sidewalks, bicycle paths, and recreational trails (including the Coastal Trail) should be designed and regulated to encourage walking, bicycling, and transit ridership.
- **2.9.1-9.** The City shall encourage employers to provide incentives for transit ridership (e.g. subsidies for transit use, shuttles to transit stations), ridesharing, vanpools, and other transportation demand measures designed to reduce vehicle miles traveled.
- **2.9.1-10.** Encourage new developments to design projects to facilitate transit ridership and ridesharing through such means as locating and designing building entries that are convenient to pedestrians and transit riders.

2.9.2 Bikeways and Trails

Newport Beach provides an extensive system of bikeways and trails to serve bicyclists, equestrians, and pedestrians (see Bikeways and Trails Map). In addition to providing coastal access and recreational opportunities, these bikeways and trails also facilitate alternative modes of transportation.

- 2.9.2-1. Maintain, expand, and encourage the use of bikeways and trails as alternative circulation routes.
- **2.9.2-2.** Continue to cooperate with state, federal, county and local agencies to coordinate bikeways and trails throughout the region.



Bicycle racks at 32nd Street end

- **2.9.2-3.** Develop and implement a uniform signing program to assist the public in locating, recognizing, and utilizing public bikeways and trails.
- **2.9.2-4.** Design and site new development to provide connections to existing and proposed bikeways and trail systems.
- **2.9.2-5.** Where appropriate, provide bicycle racks and hitching posts at public beaches and parks.
- **2.9.2-6.** Require new non-residential developments with floor areas of 10,000 square feet or more to provide bicycle racks for use by customers. Encourage smaller non-residential developments to provide such facilities, when feasible.
- **2.9.2-7.** Require new non-residential developments with a total for 100 or more employees to provide bicycle racks, lockers, and showers for use by employees and tenants who commute by bicycle. Encourage smaller non-residential developments to provide such facilities, when feasible.

Note: See Section 3.1 for public access policies.

2.9.3 Parking

Parking in the coastal zone is a major issue in Newport Beach. Surveys indicate that the current supply is generally adequate in the winter for both residents and visitors. During the summer the demand for parking increases. During peak summer weekends, parking demand associated with beach and bay uses is virtually unlimited.

Commercial

All of the commercial areas in the coastal zone were originally developed at a time when little or no off-street parking was required. Therefore, a number of properties do not conform to current off-street parking requirements. In many coastal zone commercial areas, commercial parking demand is accommodated by on-street parking spaces and in public lots. This has created conflicts between commercial uses, residential uses, and coastal zone visitors.

The City's off-street parking regulations are consistent with other coastal communities and are adequate to meet land use demands. Therefore, new development will be required to provide adequate off-street parking.

The coastal zone's main commercial areas were studied during the summer of 2002 to determine if there is adequate parking. Field observations and analysis were conducted to inventory and review current parking conditions. A forecast of future parking adequacy was also conducted using a parking analysis model.



West Newport commercial

West Newport. West Newport is a commercial strip on the north side of West Coast Highway between the Semeniuk Slough and the city limits. Of the 258 parking spaces, there are slightly more private off-street spaces (57%) than public on-street spaces. There are also 174 public spaces on the south side of West Coast Highway in the West Newport Park lots and on Seashore Drive. The 2002 field observations indicate there adequate parking on the north side of West Coast Highway to meet land use Public spaces along the demands.

south side were occupied with residential vehicles in the early morning and were replaced with beach traffic in the afternoon until the evening when residential vehicles returned.

The parking analysis model indicates that parking in this area should be adequate to accommodate demand. Beach users mainly use the parking on the south side and it is anticipated that none of these spaces are needed to serve demand from the north side of the highway.

Mariner's Mile. The Mariner's Mile commercial area is located on Coast Highway between Newport Boulevard and Dover Drive. Marine-related, visitor serving, and entertainment businesses dominate the Mariner's Mile waterfront. Therefore, most coastal zone visitors in this area are patrons of these businesses. The vast majority (87%) of 3,245 parking spaces in Mariner's Mile are private spaces designated for use by business patrons. The 2002 field observations indicate there is adequate parking during daytime hours, but that parking facilities reach effective capacity during evening hours, due to the concentration of restaurants and entertainment establishments.

The parking analysis model indicates that a parking shortage should be experienced in the Mariner's Mile area during the weekday midday hours. This discrepancy with the 2002 field observations indicate that the area is experiencing a higher than normal amount of multi-purpose trips, and/or trips by alternative mode than

estimated in the parking requirements or that some land uses may not be open during the weekday midday hours as anticipated in the parking estimates.

Balboa Peninsula. Lido/McFadden includes the Lido, Civic Center, Cannery Village, and Newport Pier commercial areas. The majority (56%) of 5,393 parking spaces in Lido/McFadden are in public lots and on-street. In Balboa Village, the vast majority (73%) of 1,267 parking spaces are in public lots and on-street. The 2002 field observations indicate that on both weekdays and weekends, public lots are used more heavily than any other type of parking and private lots have the lowest occupancy. Parking analysis indicates parking shortfalls in both Lido/McFadden and Balboa Village.

Marine Avenue. Marine Avenue is a retail district on Balboa Island that is popular with residents and coastal zone visitors. Of the 134 parking spaces, Balboa Pier parking lot there are slightly more public on-street spaces



(57%) than private off-street spaces. The 2002 field observations indicate that parking is routinely at or above capacity and that parking demand extends well beyond the blocks immediately surrounding the business area.



Marine Avenue on Balboa Island

The model indicates a significant latent demand for parking in this area. The density of development along Marine Avenue and the pedestrian-oriented character of the development create a unique condition in this area. Land uses in the area generate trips with a much higher than normal amount of multi-purpose stops. In addition, many of the existing land uses cater to the needs of the local residents who walk to and from the sites, as well as to visitors. Therefore, the actual parking demand is less than the model is predicting. However, the demand is still much higher than the current supply.

<u>Corona del Mar</u>. Corona del Mar is a commercial strip along East Coast Highway between Avocado Avenue and Hazel Drive. Only the south side of this commercial area is located within the coastal zone. The vast majority (88%) of 2,031 parking spaces in Corona del Mar are private spaces designated for use by business patrons. The 2002 field observations indicate there is adequate parking to meet land use demands.

The parking analysis model indicates that existing supply is more than adequate for the existing uses. Overestimated demand may be caused by a higher than expected number of multi-purpose trips or differences in the anticipated split of modes of transportation. Because of the amount of private parking in this area versus public spaces, it is less likely to have a large amount of shared parking occurring because of temporal differences in parking demand.

Residential

Most of the residential areas in the coastal zone were also developed at a time when there was little need for automobile parking. However, unlike commercial areas, high market demand has resulted in continual remodeling and reconstruction of residential properties. New dwelling units and remodels resulting in an increase in the number of habitable rooms are required to meet current off-street parking requirements.



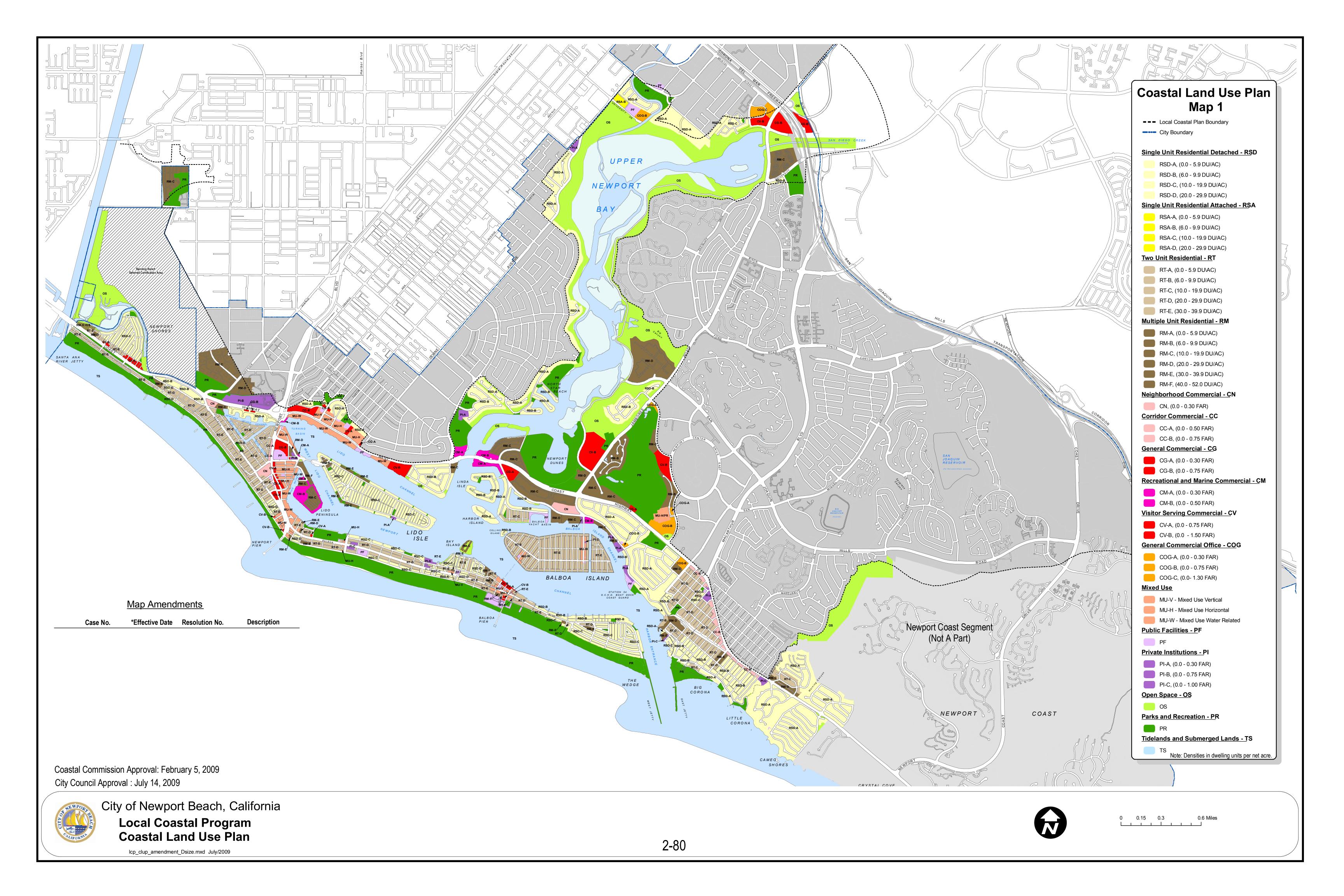
Street parking on the Balboa Peninsula

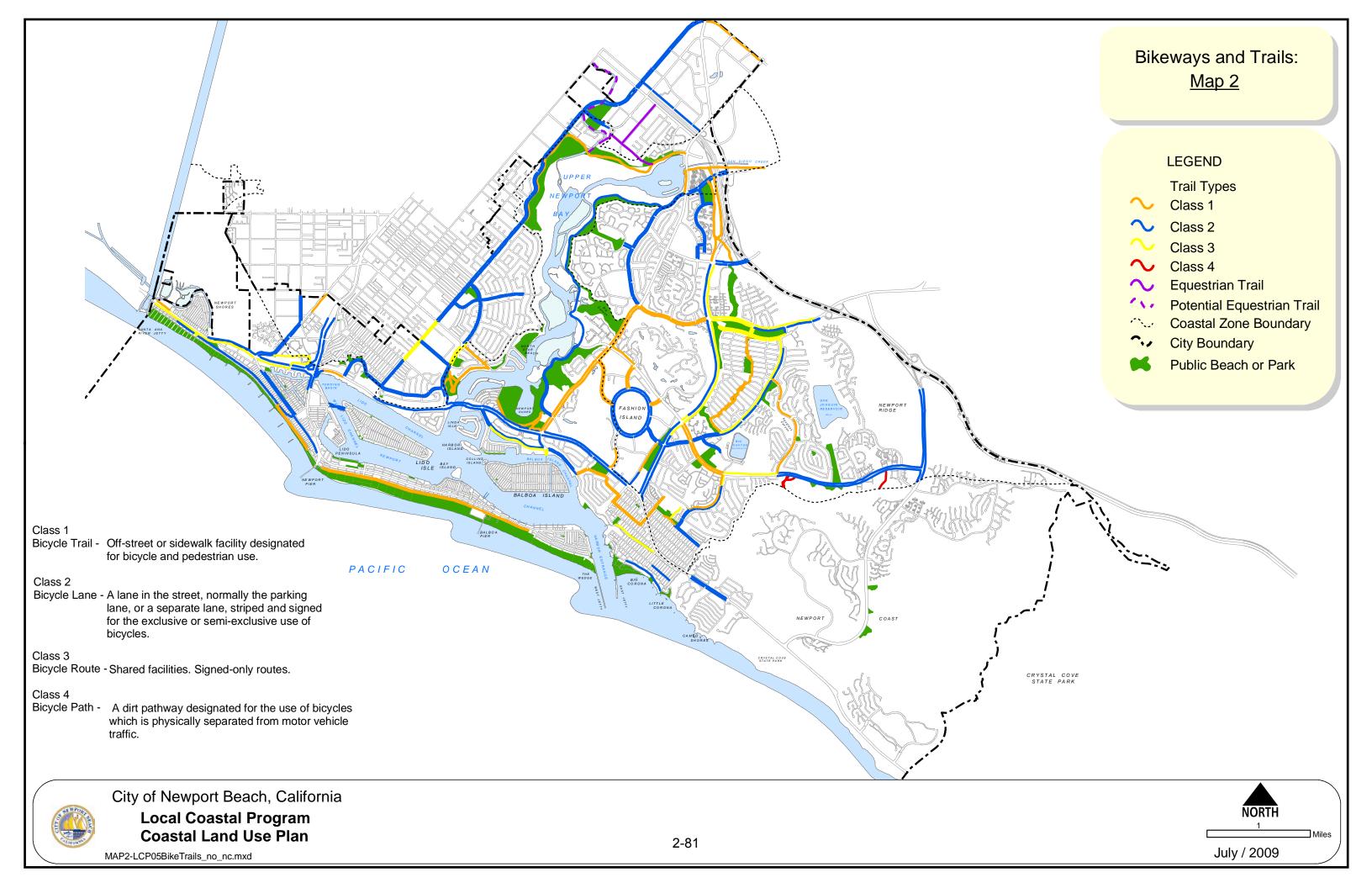
While remodels and reconstruction have increased the amount of off-street parking, parking problems continue in coastal zone residential areas. Residential dwelling units with nonconforming parking continue to exist. Also, some garages are used for purposes other then parking, including storage, office space, or living areas. popularity and demographics of the coastal zone sometimes leads to dwelling units with more people and automobiles than in inland areas. dwelling units also add to parking demand. Finally, some people simply prefer to use curbside parking due for convenience, particularly in areas where garages are accessed via narrow alleys. As a result, a significant number of coastal zone residents use public street parking or public lots instead of private off-street parking.

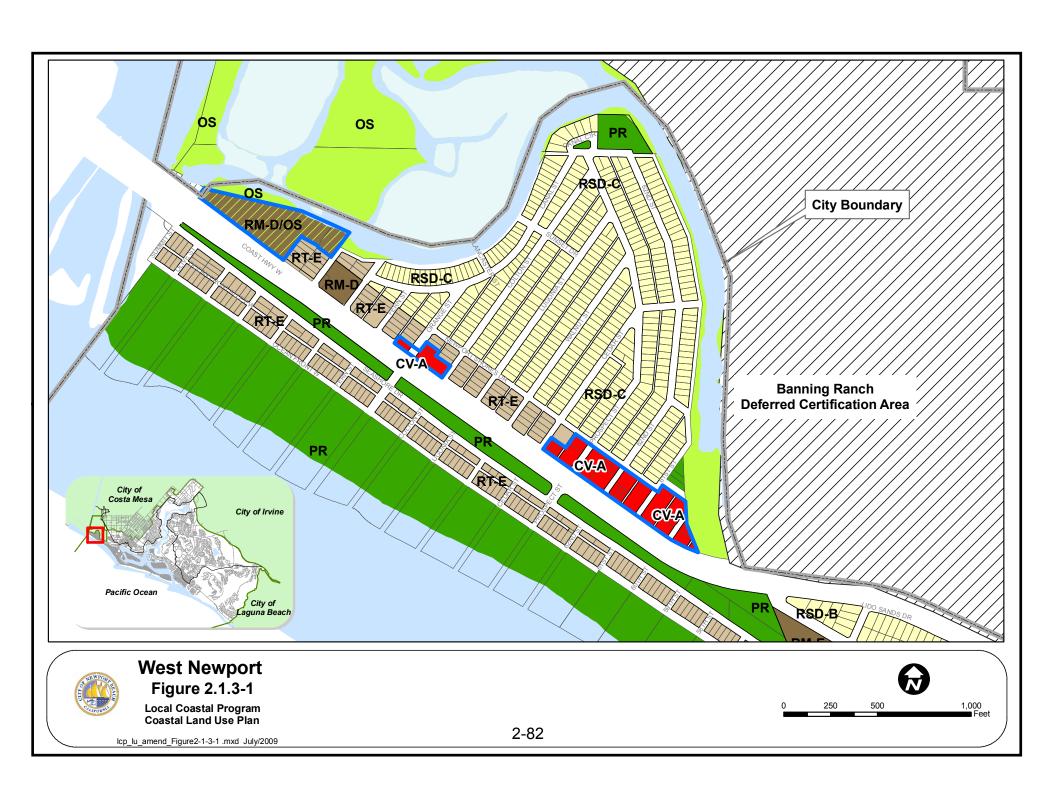
- **2.9.3-1.** Site and design new development to avoid use of parking configurations or parking management programs that are difficult to maintain and enforce.
- **2.9.3-2.** Continue to require new development to provide off-street parking sufficient to serve the approved use in order to minimize impacts to public on-street and off-street parking available for coastal access.
- **2.9.3-3.** Require that all proposed development maintain and enhance public access to the coast by providing adequate parking pursuant to the off-street parking regulations of the Zoning Code in effect as of October 13, 2005.
- **2.9.3-4.** Periodically review and update off-street parking requirements to ensure that new development provides off-street parking sufficient to serve approved uses.
- **2.9.3-5.** Continue to require off-street parking in new development to have adequate dimensions, clearances, and access to insure their use.
- 2.9.3-6. Prohibit new development that would result in restrictions on public parking that would impede or restrict public access to beaches, trails or parklands, (including, but not limited to, the posting of "no parking" signs, red curbing, and physical barriers), except where such restrictions are needed to protect public safety and where no other feasible alternative exists to provide public safety.
- 2.9.3-7. If public parking restrictions are allowed to protect public safety, require new development to provide an equivalent quantity of public parking nearby as mitigation for impacts to coastal access and recreation, where feasible.
- **2.9.3-8.** Continue to require properties with nonconforming parking to provide code-required off-street parking when new uses, alterations or additions result in increased parking demand.
- **2.9.3-9.** Approve no application for a modification or waiver of off-street parking requirements that are found to impact public parking available for coastal access.

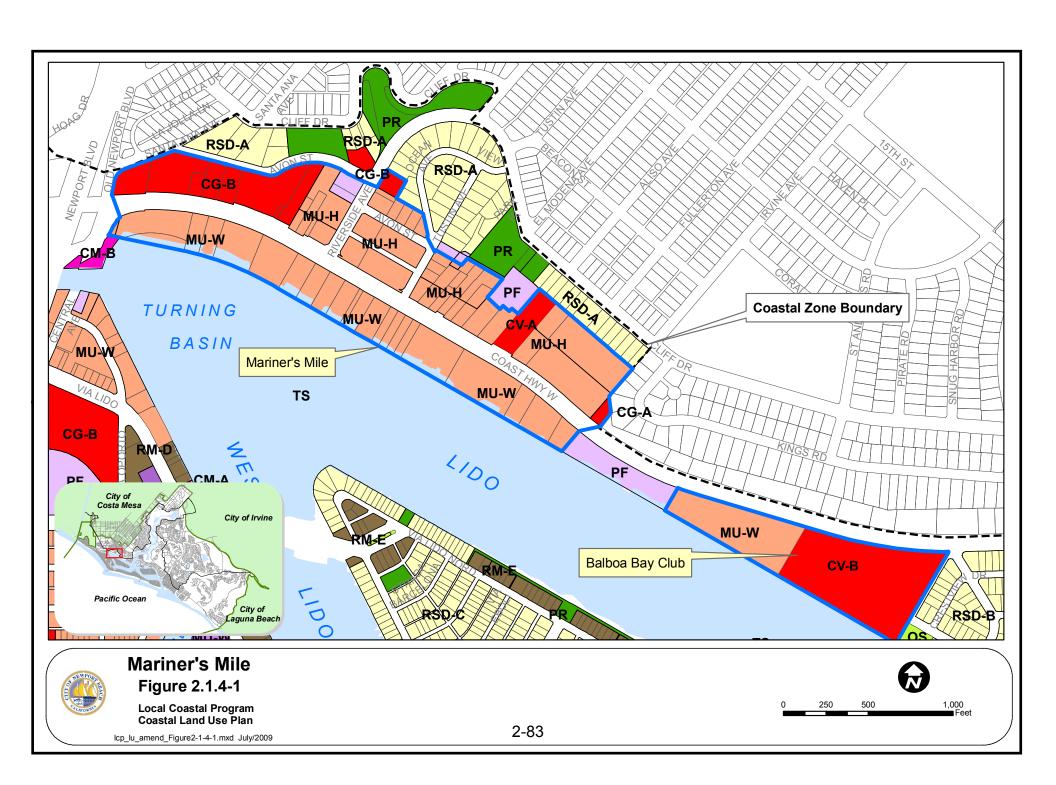
- **2.9.3-10.** Require new development to minimize curb cuts to protect on-street parking spaces. Close curb cuts to create new public parking wherever feasible.
- **2.9.3-11.** Continue to require alley access to parking areas for all new development in areas where alley access exists.
- **2.9.3-12.** Provide incentives to encourage lot consolidation where lots are of insufficient size to accommodate on-site parking and sufficient commercial intensity of development.
- **2.9.3-13.** Encourage commercial and institutional development located near beaches and other coastal resources to provide parking for public access during weekends and holidays.
- **2.9.3-14.** Develop parking management programs for coastal zone areas that achieve the following:
 - Provides adequate, convenient parking for residents, guests, business patrons, and visitors of the coastal zone;
 - Optimizes use of existing parking spaces;
 - Provides for existing and future land uses;
 - Reduces traffic congestion;
 - Limits adverse parking impacts on user groups;
 - Provides improved parking information and signage;
 - Generates reasonable revenues to cover City costs;
 - Accommodates public transit and alternative modes of transportation.
- **2.9.3-15.** Set in-lieu parking fees commensurate with actual market value for the provision of off-street parking.
- **2.9.3-16.** Continue to rigorously enforce parking ordinances.

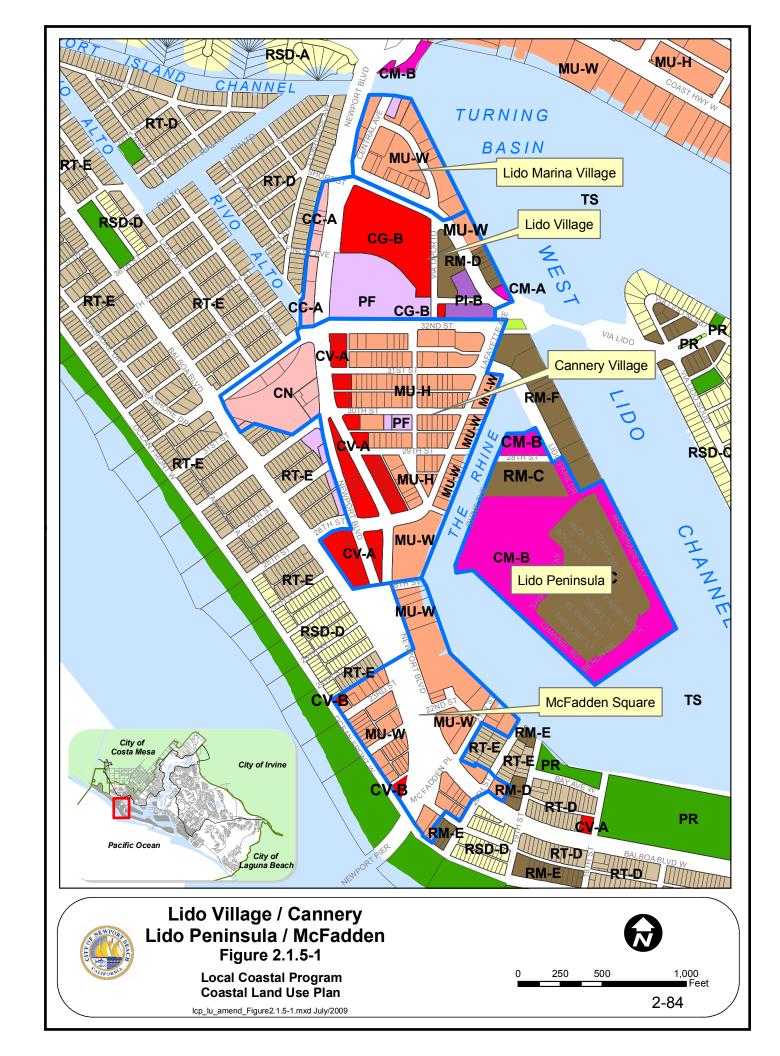
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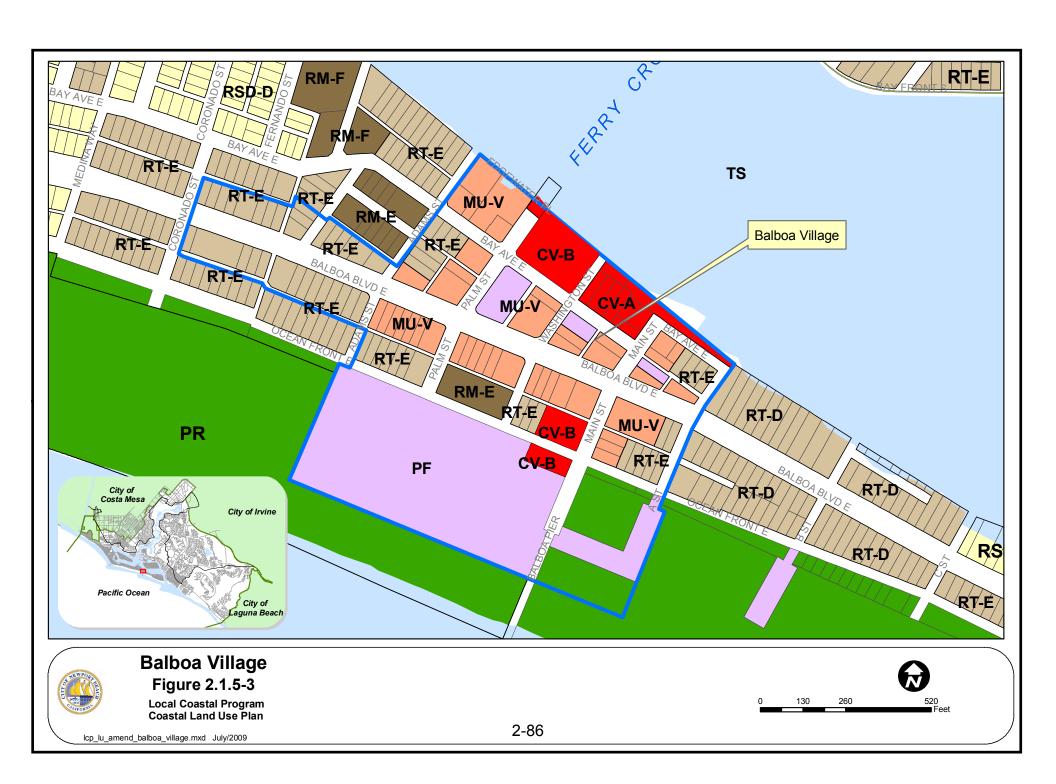


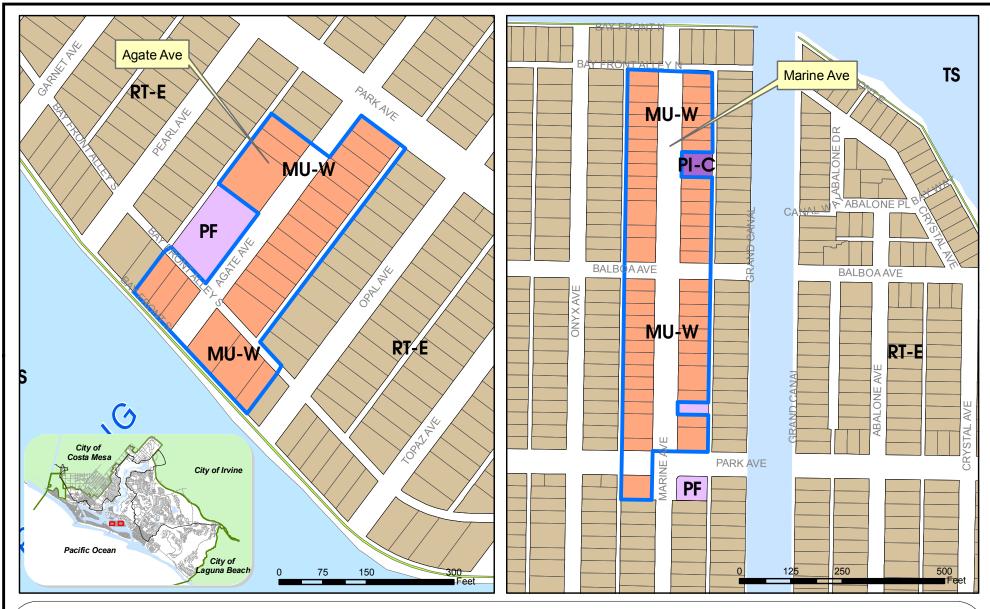












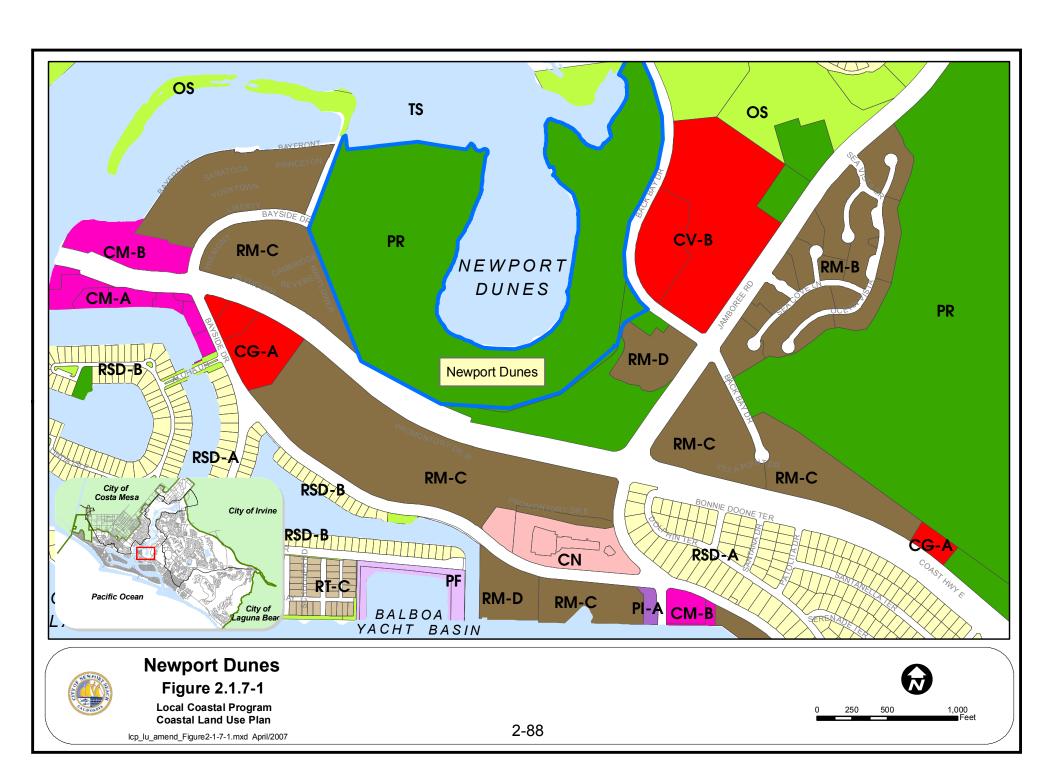


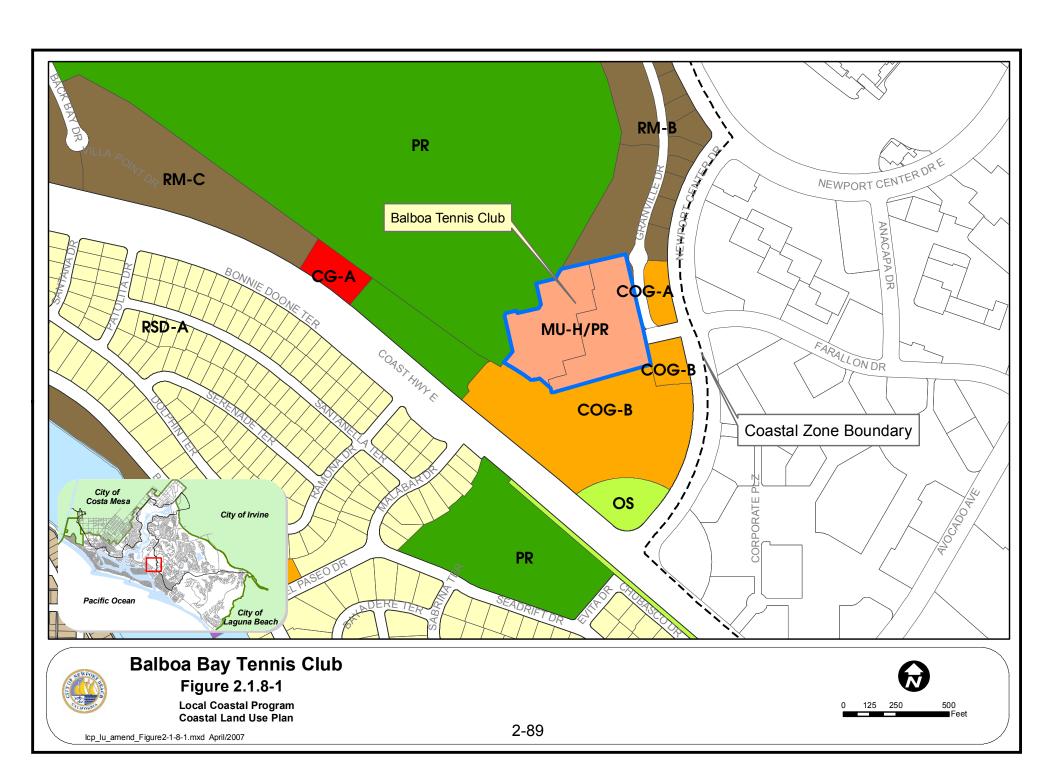
Balboa Island Commercial Figure 2.1.6-1

Local Coastal Program Coastal Land Use Plan

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3.0 Public Access and Recreation

3.1 Shoreline and Bluff Top Access

Coastal Act policies related to shoreline and bluff top access that are relevant to Newport Beach include the following:

30210. In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

30211. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

30212. (a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

30214. (a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:

- (1) Topographic and geologic site characteristics.
- (2) The capacity of the site to sustain use and at what level of intensity.
- (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.
- (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

(b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution.

(c) In carrying out the public access policies of this article, the commission and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.

3.1.1 Shoreline Access

In terms of implementing the Coastal Act, there are two basic types of public access: vertical access, or access to the shoreline, and lateral access, or access along the shoreline. Newport Beach has developed an extensive system of access to ocean beaches and the bay (see Coastal Access Map). Virtually all of the Pacific Ocean shoreline beaches are public and the bay is accessible via public beaches, parks, shoreline trails, walkways and boardwalks. The City will continue to require all new development, causing or contributing to adverse public access impacts, to provide easements or dedications in areas where public access is inadequate.

Pacific Ocean Beaches

West Newport/Balboa Peninsula. West Newport and the Balboa Peninsula have over 5 miles of wide, sandy beaches. Vertical access to these beaches is provided by 89 street ends, which occur every 200 to 500 feet. The Oceanfront Boardwalk runs along the beach for approximately 3 miles from 36th Street in West Newport to F Street on the Peninsula. This multi-use concrete walkway is 12 to 22 foot wide and is popular with pedestrians, bicyclists, and skaters.



Oceanfront Boardwalk at 15th Street

<u>Corona del Mar</u>. City-operated Corona del Mar State Beach (Big Corona) is a half mile-long sandy beach located southerly of the Newport Harbor entrance. Vertical access to this beach is provided by an access road near the intersection of Ocean Boulevard and Jasmine Avenue and by walkways at Lookout Point and Inspiration Point view parks on Ocean Boulevard.

Little Corona Beach is a small sandy cove with rocky intertidal platform reefs. The Newport Beach Marine Conservation Area is offshore. Vertical access is provided by a walkway at Poppy Avenue (Glen Drive). The Newport Beach Marine Conservation Area contains natural habitats and the provision of additional public access on Little Corona Beach must be consistent with the protection of these resources.



Big Corona

Lower Newport Bay/Harbor



Las Arenas Beach

West Newport/Balboa Peninsula. The Lower Bay shoreline of West Newport and the Balboa Peninsula consist of relatively narrow sandy beaches and bulkheads. There are 89 street ends that provide vertical access to Lower Newport Bay, including The Rhine, Newport Island, Rialto, and Rivo Alto channels. Most street ends provide a small beach and shore moorings. Larger public beaches are located at Las Arenas Beach (16th -19th Street), 10th Street Beach, Montero Beach (Island Avenue to Medina Way), and N Street Beach. Small public beaches

are also located at Channel Place Park and Newport Island Park. There is also a 0.65-mile bayfront walkway that extends from Main Street in Balboa Village to 7th Street.

Waterfront commercial areas also provide vertical and lateral access to Lower Newport Bay. Commercial developments in Lido Village, Cannery Village, McFadden Square, and Balboa Village and on the Lido Peninsula provide public access easements to and along the waterfront. In most cases, these easements have been integrated into the project's design, such as restaurants with outdoor waterfront dining areas and boarding areas for charter and excursion vessels.

New development will present additional opportunities to extend and enhance waterfront access in these areas. Particular attention should be given to extending the *Lido Marina Village* boardwalk across all of the waterfront commercial properties in Lido Village and to provide a continuous waterfront walkway along the Rhine Channel to connect the Cannery



Lido Marina Village boardwalk

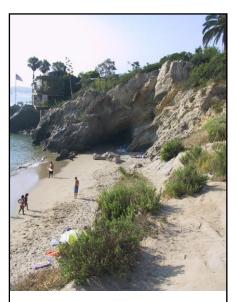
Village and McFadden Square waterfront commercial areas with Las Arenas Beach at 19th Street. A connection from Lido Village to Mariner's Mile should also be provided, if feasible.

Mariner's Mile. The Mariner's Mile is a commercial area with a shoreline consisting of bulkheads. Commercial and institutional developments Mariner's Mile provide public access easements to and along the waterfront. Although the easements fragmented, with new development, there is an opportunity to provide a continuous waterfront walkway from the Coast Highway/Newport Boulevard Bridge to the Balboa Bay Club.



Mariner's Mile

Bayside. The Bayside area shoreline Mariner's Mile consists mainly of bulkheads, with a few small beaches. Beacon Bay Beach (Lot I) is accessible from Beacon Bay Drive via walkways at the Cape Cove, Shelter Cove, and Reef Cove Street ends. Bayside Drive County Beach is accessible from Bayside Drive via the Orange County Harbor Patrol facility. Lateral access to Promontory Bay is provided by a walkway along Bayside Drive and a public access easement along the bulkhead adjacent to *Newport Marina Apartments*. This public access easement connects to a quarter mile walkway on a floating dock in the Balboa Island Channel. Lateral access is also provided around the Balboa Yacht Basin.



Pirate's Cove

Corona del Mar. Corona del Mar's bayside shoreline is at the harbor entrance and is characterized by high coastal bluffs with a few small sandy coves. China Cove is accessible from Cove Street and Shell Street. Rocky Point (Pirate's Cove) is accessible by a trail at Lookout Point on Ocean Boulevard and Corona del Mar State Beach. There is also a small pocket park in an unnamed street end off of the 2300 block of Bayside Drive that provides access to Carnation Cove.

<u>Lido Isle</u>. On Lido Isle, vertical access to the Lower Bay is provided by walkways within 13 street end easements. These street ends are leased to Lido Isle Association with the condition that the association maintain and operate all walkways in a manner that allows for open public access. There are also public beaches at Via Genoa (Parcel B) and at Via Trieste (Parcel C).

Balboa Island. All of Balboa Island's beaches are public. There are 33 street ends

that provide vertical access and the Bay Front Boardwalk that circles the island enhances lateral access. There are also 4 street ends that provide access to the Grand Canal.

Upper Newport Bay

The Upper Newport Bay is coastal wetlands bordered by 40 to 100-foot high bluffs. Most of the Upper Newport Bay area is in the Upper Newport Bay Marine Park. Due to the steep coastal bluffs and high number of sensitive environmental resources within the marine park, access is more restricted than other coastal Still, ample public access is areas. available.

The 752-acre Upper Newport Bay Marine Park preserves one of the largest coastal Upper Newport Bay Marine Park wetlands in Southern California. In



addition to protecting its diverse habitats, the marine park provides canoe, kayak, Shellmaker Island in the marine park serves as a staging area and walking tours. for tours of the Upper Newport Bay. Shellmaker Island is only open to the public when programs and tours are scheduled and is accessible from Back Bay Drive. The marine park is also accessible from University Drive and Back Bay Drive.



Back Bay Drive

The Upper Newport Bay Nature Preserve is located on the bluffs on the north and northwest sides of the Upper Newport Bay Marine Park. This 140-acre regional park provides hiking, bike, equestrian trails to and along the marine park. The Upper Newport Bay Nature Preserve is accessible from University Drive and Bayview Way.

Access to and along the Upper Newport Bay is also provided by Back Bay Drive, a 3.5-mile multimodel road that runs along the base of the bluff on the easterly side of the bay. Back Bay Drive begins at Jamboree Road and ends at East Bluff Drive, where it connects with a trail that continues west of Jamboree Road and along San Diego Creek into central Orange County. The Lookout at

the corner of Back Bay Drive and East Bluff Drive serves

as a staging area for tours of the bay.

On the west side of the bay, access is provided via North Star Beach. North Star Beach has a sandy beach and is the site of the Newport Aquatics Center, a public recreation and launching facility. North Star Beach is accessible from White Cliffs Drive, off of Polaris Drive. The area north of the Newport Aquatics Center contains natural habitats and the provision of additional public access in this area must be consistent with the protection of these resources.

On the east side of the bay, access is provided by Big Canyon Nature Park. Big Canyon Nature Park is a passive open space area that provides hiking trails from Jamboree Road to the Upper Newport Bay Marine Park. The mouth of Big Canyon contains natural habitats and the provision of additional public access must be consistent with the protection of these resources.

Semeniuk Slough

Semeniuk Slough, also referred to as the Oxbow Loop, is a coastal salt marsh. The slough is accessible via 9 street ends in Newport Shores and the Newport Shores View Park. The provision of public access must be consistent with the protection of the adjacent natural resources.

- **3.1.1-1.** Protect, and where feasible, expand and enhance public access to and along the shoreline and to beaches, coastal waters, tidelands, coastal parks, and trails.
- **3.1.1-2.** Protect and enhance all existing public street ends providing public access to the shoreline, beaches, coastal parks, and trails.
- Develop and implement a uniform 3.1.1-3. coastal access signing program to assist the public in locating, recognizing, and utilizing public access trails. Where appropriate, include information advising the public of environmentally sensitive habitats. safety hazards, and to respect adjacent private property.



Boardwalk through coastal sage scrub habitat

- **3.1.1-4.** Identify and remove all unauthorized structures, including signs and fences, which inhibit public access.
- **3.1.1-5.** Allow public access improvements in environmentally sensitive habitat areas (ESHA) when sited, designed, and maintained in a manner to avoid or minimize impacts to the ESHA.
- **3.1.1-6.** Continue to cooperate with the State Department of Parks and Recreation, the State Department of Fish and Game, the State Coastal Conservancy, Orange County, and private organizations to protect, expand and enhance public access to and along the shoreline and to beaches, coastal parks, and trails.
- **3.1.1-7.** Continue to protect the public's right of access to the sea where acquired through historic use or legislative authorization. Where substantial evidence of prescriptive rights exists, actively pursue public acquisition or require access easements as a condition for new development.
- **3.1.1-8.** Where there is substantial evidence that prescriptive rights of access to the beach exist on a parcel, development on that parcel must be designed, or conditions must be imposed, to avoid interference with the prescriptive rights that may exist or to provide alternative, equivalent access.
- **3.1.1-9.** Protect, expand, and enhance a system of public coastal access that achieves the following:
 - Maximizes public access to and along the shoreline;
 - Includes pedestrian, hiking, bicycle, and equestrian trails;
 - Provides connections to beaches, parks, and recreational facilities;
 - Provides connections with trail systems of adjacent jurisdictions;
 - Provides access to coastal view corridors:
 - Facilitates alternative modes of transportation;
 - Minimizes alterations to natural landforms:
 - Protects environmentally sensitive habitat areas;

- Does not violate private property rights.
- **3.1.1-10.** Cooperate with state agencies in planning and implementing the Newport Beach segment of the California Coastal Trail.
- **3.1.1-11.** Require new development to minimize impacts to public access to and along the shoreline.
- 3.1.1-12. Implement building design and siting regulations to protect public access through setback and other property development regulations of the Zoning Code that control building placement.



Walkway and bikeway along Promontory Bay

- 3.1.1-13. Require a direct dedication or an Offer to Dedicate (OTD) an easement for lateral public access for all new shorefront development causing or contributing to adverse public access impacts. Such dedication or easement shall extend from the limits of public ownership (e.g. mean high tide line) landward to a fixed point seaward of the primary extent of development (e.g. intersection of sand with toe or top of revetment, vertical face of seawall, dripline of deck, or toe of bluff).
- 3.1.1-14. Require a direct dedication or an Offer to Dedicate (OTD) an easement for vertical access in all new development projects causing or contributing to adverse public access impacts, unless adequate access is available nearby. Vertical accessways shall be a sufficient size to accommodate two-way pedestrian passage and landscape buffer and should be sited along the border or side property line of the project site or away from existing or proposed development to the maximum feasible extent.
- **3.1.1-15.** Encourage the acceptance, improvement and opening of OTDs to the public by the City, a public agency, a private association, or other appropriate entity.
- **3.1.1-16.** Require all direct dedications or OTDs for public access to be made to a public agency or other appropriate entity that will operate the accessway on behalf of the public. Require accessways to be opened to the public

- once an appropriate entity accepts responsibility for maintenance and liability.
- 3.1.1-17. Require new development in waterfront commercial areas to provide public access easements to and along the waterfront. Where appropriate, integrate public access easements into the project designs, such as restaurants with outdoor waterfront dining areas and boarding areas for charter and excursion vessels.
- 3.1.1-18. Require new development on ocean-fronting, residentially zoned properties located between the Santa Ana River Jetties and the Newport Harbor West Jetty to conform to the setback requirements of the Zoning Code in effect as of October 13, 2005 to prevent impacts to public access.



- 3.1.1-19. Develop and implement a long-range plan for public 15th Street Beach trails and walkways to access all appropriate commercial areas of the harbor.
- **3.1.1-20.** Extend the *Lido Marina Village* boardwalk across all of the waterfront commercial properties in Lido Village.
- **3.1.1-21.** Provide a continuous waterfront walkway along the Rhine Channel connecting Cannery Village and McFadden Square waterfront commercial areas with Las Arenas Beach at 19th Street.
- **3.1.1-22.** Provide a walkway connecting the Lido Village area with Mariner's Mile, if feasible.
- **3.1.1-23.** Provide a continuous walkway along the Mariner's Mile waterfront from the Coast Highway/Newport Boulevard Bridge to the *Balboa Bay Club*.
- **3.1.1-24.** Encourage the creation of new public vertical accessways where feasible, including Corona del Mar and other areas of limited public accessibility.
- **3.1.1-25.** Where marine sales and service equipment and operations present

- security or public safety concerns, waterfront access detours may be necessary in some areas in order to maintain facilities and services essential to the operation of the harbor.
- **3.1.1-26.** Consistent with the policies above, provide maximum public access from the nearest public roadway to the shoreline and along the shoreline with new development except where (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources or (2) adequate access exists nearby.
- **3.1.1-27.** Implement public access policies in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:
 - Topographic and geologic site characteristics;
 - Capacity of the site to sustain use and at what level of intensity;
 - Fragility of natural resource areas;
 - Proximity to residential uses;
 - Public safety services, including lifeguards, fire, and police access;
 - Support facilities, including parking and restrooms;
 - Management and maintenance of the access;
 - The need to balance constitutional rights of individual property owners and the public's constitutional rights of access.
- **3.1.1-28.** Encourage the creation of waterfront public spaces and beaches, with adjacent water access and docking facilities that serves as the identity and activity "centers" of Newport Harbor for special events of community/regional interest.



Balboa Pier

3.1.2. Bluff Top Access

In addition to direct access to and along the shoreline, Newport Beach has worked to preserve a number of prominent bluff top locations for public viewing of the shoreline (see Coastal Access and Recreation Map).



Castaways View Park

<u>West Newport</u>. The Sunset View Park provides an ocean view trail along the bluff top above the lower campus of Hoag Hospital. This park is accessible from Superior Avenue. The planned extension of this park to Superior Avenue will provide a connection to a bluff top trail in a park planned on the undeveloped CalTrans West property. Connections to future bluff top trails and parks developed in conjunction with future development in the Banning Ranch property present the opportunity for a continuous bluff top trail through West Newport.



Lookout Point

Newport Heights/Cliff Haven. Cliff Drive Park, Ensign Park, and Kings Road Park are located on the bluff top above Mariner's Mile and Coast Highway. These parks provide views of the Lower Bay and the Pacific Ocean. Cliff Drive Park and Ensign Park are accessible from Cliff Drive. Kings Road Park is accessible from Kings Road.

Corona del Mar. A half-mile linear view park that provides spectacular views of the harbor entrance and Pacific Ocean is located along the bluff top above Corona del Mar State Beach. The park begins at Lookout Point above Pirate's Cove and runs along Ocean Boulevard to Inspiration Point at the end of Orchid Avenue.

Upper Newport Bay. Castaways Park is a 17.4-acre view park. Castaways Park has bike and hiking trails and overlooks that provide panoramic views of the Newport Bay and the Pacific Ocean. Castaways Park is accessible from Dover Drive and Polaris Drive. Castaways Park contains natural habitats, which are separated and protected from public recreation and viewing areas.

Westcliff Park, Galaxy Park, and Bayview Park are bluff top parks that provide views of the Upper



Bluff habitat protected at Castaways Park

Newport Bay. Westcliff Park is accessible from Polaris Drive. Galaxy Park is accessible from Galaxy Drive. Bayview Park is accessible from Mesa Drive.

The Upper Newport Bay Nature Preserve is a 140-acre regional park that surrounds the Upper Newport Bay Marine Park. The park provides hiking, bike, and equestrian trails and is accessible from Irvine Avenue, University Drive and Bayview Way.

Newporter Knoll is a 12-acre passive open space area located on the bluff above Shellmaker Island. The 4-acre Newporter North View Park is adjacent and provides a bluff top trail and overlook. The Newporter North View Park is accessible from San Joaquin Hills Road. Both areas contain natural habitats and the provision of additional public access must be consistent with the protection these resources.

A 10.74-acre passive open space and view park is planned for the bluff above the Newport Dunes. The Upper Bayview Landing park site is located at the northwest corner of the intersection of Coast Highway and Jamboree Road. This park will provide views of the bay and serve as a staging area for bicyclists and pedestrians.

- **3.1.2-1.** Protect, and where feasible, expand and enhance public access to and along coastal bluffs.
- **3.1.2-2.** Site, design, and maintain public access improvements in a manner to avoid or minimize impacts to coastal bluffs (see Section 4.4.3).
- **3.1.2-3.** Continue to cooperate with the State Department of Parks and Recreation, the State Department of Fish and Game, the State Coastal Conservancy,

Orange County, and private organizations to protect, expand and enhance public access to and along coastal bluffs.

3.1.3 Beach Encroachments

On June 11, 1991, the Coastal Commission approved the Oceanfront Encroachment Policy (Amendment No. 23), which established a policy and mitigation program relating to private improvements within the Oceanfront public right-of-way. The City Council finalized this policy with the adoption of Resolution No. 91-80 on July 11, 1991. This policy established conditions and restrictions on the nature and extent of these improvements and a mitigation program involving the reconstruction of West Newport street end 33 unimproved street ends between 36th



Street and Summit Street to provide additional parking and improved public access. In 2002, the final five street ends were reconstructed. Pursuant to the mitigation program, a minimum of 85 percent of the encroachment fees will be used for the construction and maintenance of improvements which directly benefit the beachgoing public such as parking spaces, restrooms, vertical or lateral walkways along the beach and similar projects.

- 3.1.3-1. Continue to maintain and improve the Oceanfront public right-of-way for public access purposes.
- 3.1.3-2. Continue to restrict the nature and extent of improvements that may be installed over public rights of way on the oceanside of beachfront residences and to preserve the City's right to utilize oceanfront street easements for public projects.
- 3.1.3-3. Limit the maximum oceanward extent of encroachments to the following encroachment zones:
 - A. Santa Ana River to 52nd Street. A maximum of 15 feet oceanward of the rear (ocean facing) property line within the oceanward prolongation of the side property lines.

- B. <u>52nd Street to 36th Street</u>. A maximum of 10 feet oceanward of the rear (ocean facing) property line within the oceanward prolongation of the side property lines.
- C. <u>36th Street to E Street</u>. Between A Street and a point 250 feet southeast of E Street, up to the inland edge of the Oceanfront Boardwalk (7 to 8 feet oceanward of the rear property line) and within an oceanward prolongation of the side property lines.
- D. <u>E Street to Channel Road</u>. No encroachments are permitted from a point 250 feet southeast of E Street to Channel Road, with the exception of landscaping trees existing prior to October 22, 1991 and groundcover.
- **3.1.3-4.** Limit encroachments within encroachment zones as follows:
 - A. Prohibit any structural, electrical, plumbing or other improvements that require issuance of a building permit.
 - B. Prohibit pressurized irrigation lines and valves.
 - C. Prohibit any object that exceeds 36 inches in height, with the exception of landscaping.
 - D. Prohibit any encroachments that impact public access, recreation, views and/or coastal resources.
 - E. Require landscaping to be designed and maintained to avoid impacts to public access and views.
 - F. Restrict landscaping in dune habitat areas to native vegetation.
- **3.1.3-5.** Require annual renewal of encroachment permits and a fee.
- **3.1.3-6.** Require encroachment permits to specify that the property owner waives and gives up any right to contest the validity of the oceanfront street easement, and that the encroachment permit is revocable, without cause, if the City proposes to construct public improvements within that zone.
- **3.1.3-7.** Require encroachment permits to specify that the construction of any seawall, revetment or other erosion control devices, if necessary, shall occur within, or as close as feasible to, private property.

- **3.1.3-8.** Incorporate into the implementation plan regulations specifying the types of improvements permitted within encroachment zones, a prohibition on improvements that could impair or restrict public access or views, procedures for the encroachment permit applications, City administration of the policy, and other appropriate provisions.
- **3.1.3-9.** As mitigation for any impact on beach access resulting from the encroachments:
 - A. Maintain 33 street ends between 36th Street and Summit to provide an average of 2 parking spaces per street, and additional spaces where feasible.
- B. Meter West Newport street end parking spaces in the same manner as the West

West Newport street end improvements

- Newport Park in order to encourage public use of the spaces.
- C. Maintain a hard surface walkway perpendicular to Seashore Drive at Orange Avenue. The walkway shall extend oceanward a sufficient distance to allow a view of the surfline by an individual seated in a wheelchair. At least one handicapped parking space shall be designated at the Orange Avenue street end and at least one other handicapped parking space at one other West Newport street end.
- D. Require a minimum of 85 percent of the fees generated by encroachments will be used for the construction and maintenance of improvements which directly benefit the beach-going public such as parking spaces, restrooms, vertical or lateral walkways along the beach and similar projects.

3.1.4 Bay/Harbor Encroachments

Shore connected structures, such as piers, floats, and bulkheads have long been permitted in the bay and harbor. Newport Beach, in conjunction with Federal, State, and County agencies, has established a set of Harbor Lines to define bayward limits for various types of Harbor Lines and other structures. regulations were originally established to insure navigable channels and safe harbor operations and to minimize conflicts with adjacent properties. However, such regulations increasingly used as a means of protecting public views and public access.



Residential piers

- **3.1.4-1.** Continue to regulate the construction of bay and harbor structures within established Bulkhead Lines, Pierhead Lines, and Project Lines.
- **3.1.4-2.** When applicable, continue to require evidence of approval from the County of Orange, Coastal Commission, U.S. Army Corps of Engineers, and other resource management agencies, prior to issuing permits.
- **3.1.4-3.** Design and site piers, including remodels of and additions to existing piers so as not to obstruct public lateral access and to minimize impacts to coastal views and coastal resources.
- **3.1.4-4.** In residential areas, limit structures bayward of the bulkhead line to piers and floats. Limit appurtenances and storage areas to those related to vessel launching and berthing.
- **3.1.4-5.** Encourage the joint ownership of piers at the prolongation of common lot lines as a means of reducing the number of piers along the shoreline.
- **3.1.4-6.** Continue to prohibit private piers at street ends.
- **3.1.4-7.** Design and site bulkheads to protect the character of the existing shoreline profiles and avoid encroachment onto public tidelands.

3.1.4-8. Limit bulkhead expansion or encroachment into coastal waters to the minimum extent necessary to repair, maintain, or replace an existing bulkhead and do not allow the backfill to create new usable residential land areas.

3.1.5 Private/Gated Communities

Throughout Southern California, access to the shoreline is restricted to the public due to private residential communities. Exclusive gated communities in some cases totally circumvent public access to the shoreline. Such communities present a major issue in terms of protecting, expanding, and enhancing coastal access.

Most of the shoreline in Newport Beach is publicly owned and accessible. However, there are a few private residential communities that impede public access to and along the shoreline. These communities are Balboa Coves, Bay Island, Bayshores, Bayside Place, Collins Island, De Anza Bayside Village, Linda Isle, and Harbor Island. Some of these communities are on small private islands. They do not impede access to public beaches, coastal parks, trails, or coastal bluffs; however, they do block public access to and along their immediate shoreline. Balboa Coves, Bayside Place, Bayshores and De Anza Bayside Village are on the mainland, but are situated so as not to block public access other than to their immediate shoreline. In all of these areas, the shoreline consists mainly of bulkheads with a few small and isolated sandy beaches.



De Anza Bayside Village

<u>Balboa Coves</u>. Balboa Coves is a 68-lot single-family gated community located on the Newport Island Channel southwest of the Newport Boulevard/Coast Highway Bridge. The community is accessible from Coast Highway via Balboa Coves, a private street. The shoreline is on the south side of the community and consists of a series of manmade coves with narrow sandy beaches.

<u>Bay Island</u>. First developed around 1904, Bay Island is a 25-unit (currently developed with 24 units, including one caretaker's unit) single family cooperative on a private island in the Newport Channel. A gated pedestrian bridge at the end of Island Avenue connects Bay Island with the Balboa Peninsula. Motor vehicles are prohibited on the island. Off-street parking for residents is provided at a 48-space parking structure located at 501 West Bay Avenue. The shoreline consists mainly of

bulkheads, with the exception of the east side of the island, which has a relatively wide sandy beach.

<u>Bayshores</u>. Developed in 1941, Bayshores is a 258-lot single-family gated community located on the Lido Channel southwest of the Coast Highway/Newport Bay Bridge. The 39-unit Anchorage Apartments is also located within the community. The community is accessible from Coast Highway via Bay Shores Drive, a private street. The shoreline is on the south and east sides of the community and consists of bulkheads and two small sandy beaches.

<u>Bayside Place</u>. Bayside Place is a 7-lot single-family gated community located off of the 2300 block of Bayside Drive. The community is accessible from Bayside Drive via Bayside Place, a private street. The shoreline (Carnation Cove) consists of bulkheads and rocky beaches. Public access to the shoreline is available at an adjacent street end pocket park.

<u>Collins Island</u>. Created in 1906, Collins Island is a 7-lot single-family community on a private island in the Balboa Island Channel. A gated bridge at the end of Park Avenue connects Collins Island with Balboa Island. The shoreline consists of bulkheads.

<u>De Anza Bayside Village</u>. De Anza Bayside Village is a 343-space mobile home park located on the Upper Newport Bay adjacent to the Newport Dunes. The community is accessible to Bayside Drive via Bayside Way, a private street. The shoreline is on the north side of the community and consists of bulkheads and a small sandy beach at the community center. The community includes the undeveloped De Anza/Bayside Marsh Peninsula.

Harbor Island. Developed in 1926, Harbor Island is a 35-lot single-family community on a private island located between Linda Isle and Collins Island. A gated bridge connects Harbor Island to the mainland at the end of Harbor Island Road. The shoreline consists mainly of bulkheads. The State, through the adoption of Chapter 715, Statues of 1984, found that tidelands surrounding Harbor Island are generally inaccessible to the public and not suitable for public trust uses (see Section 2.5.2).



Harbor Island

<u>Linda Isle</u>. Created in 1933 and developed in the 1960s, Linda Isle is a 107-lot single-family community on a private island southwest of the Coast Highway Bridge. A gated bridge connects Linda Isle to the mainland at Bayside Drive. The shoreline consists of bulkheads and a small sandy beach.

All of these communities are long established. New development is generally of a type and scale that does not have a direct adverse impact on existing public access. Such new development generally consists of additions or demolition and subsequent reconstruction of existing structures. Requiring public access under such circumstances would not present a reasonable relationship between the exaction and a project and would be disproportionate to the impact. However, new development resulting in significant increases in land use density or intensity would have the potential to have a direct adverse impact on public access. Similarly, new development that limits or eliminates private recreational facilities within such communities could place additional demand on public recreational facilities, including Under such circumstances, public access mitigation in a manner beaches. consistent with the public access policies of the Coastal Land Use Plan would be required.

- **3.1.5-1.** Prohibit new development that incorporate gates, guardhouses, barriers or other structures designed to regulate or restrict access where they would inhibit public access to and along the shoreline and to beaches, coastal parks, trails, or coastal bluffs.
- **3.1.5-2.** Prohibit new private streets, or the conversion of public streets to private streets, where such a conversion would inhibit public access to and along the shoreline and to beaches, coastal parks, trails, or coastal bluffs.
- **3.1.5-3.** Require public access consistent with public access policies for any new development in private/gated communities causing or contributing to adverse public access impacts.

3.1.6 Preferential Parking Districts



Newport Island

In Newport Beach, there is only one preferential parking district in the coastal zone. It was established for Newport Island in 1981 due to impacts associated with vehicle parking on streets and alleys by nonresidents for extended periods of time. The establishment of the Newport Island preferential parking district was determined not to adversely impact coastal access and recreation due to the island's isolated location, lack of beaches and swimming areas, and narrow streets.

The establishment of additional preferential parking districts may be necessary where no other practical or feasible alternative exists to protect the public health, safety, and general welfare. Under such circumstances, if there is a direct impact to coastal access or recreation, preferential permit parking fees could be established to fund mitigation programs.

- **3.1.6-1.** Prohibit the establishment of new preferential parking districts in the coastal zone except where such restrictions would not have a direct impact to coastal access, including the ability to use public parking.
- **3.1.6-2.** Require a coastal development permit to establish new, or modify existing, preferential parking districts.
- **3.1.6-3.** Use preferential parking permit fees to fund programs to mitigate impacts to coastal access.
- **3.1.6-4.** Where appropriate, establish a graduated preferential parking permit fee schedule where progressively higher fees are required for each permit for households with multiple permits.
- **3.1.6-5.** Limit the number of preferential parking permits issued per household to reduce potential adverse impacts to public access.

3.1.7 Temporary Events



22nd Street Beach

Newport Beach's coastal areas have long been the venue for temporary events, including film production, surfina contests. volleyball tournaments, runs, races, concerts, shows. and other boat such competitions, exhibitions. and events. Also, a number of view parks have become popular locations for private large gatherings. The nature and frequency of such events has raised concerns relating to their impact to coastal resources, public access, and on adjacent residential areas, during these events.

Newport Beach regulates temporary events by requiring special event permits. It is City policy that athletic contests using City streets are not permitted during the summer (June 15 - September 15). Surfing contests are not permitted during the Memorial Day weekend or during the summer. There are also limits on the number of such events that can be conducted each year and a minimum number of weeks between each surfing contest. However, exceptions can be granted.

Inspiration Point and Lookout Point have become popular locations for weddings and other events. Peninsula Park is also a popular location for weddings, as well as company picnics and other private gatherings. Excessive reservations for the use of these parks has seriously limited public access. Furthermore, the use of these parks by caterers, party rental companies, professional party, event, or wedding planners for private parties presented the appearance of commercialization of public parks. This prompted the establishment of a policy placing restrictions on reservations from the Memorial Day weekend to the Labor Day weekend. The number of attendees or participants at any one time is also restricted.

Policies:

3.1.7-1. Continue to require special event permits for temporary events and continue to require applications to provide details on event characteristics, including duration (including set up/assembly and break down/dismantle start and completion times), event hours, per day estimated attendance, parking arrangements, traffic control, noise control, waste removal, insurance, equipment to be used, food

service, entertainment, sponsorships, and advertising and marketing plans.

- **3.1.7-2.** Condition special event permits for temporary uses in the coastal zone to minimize impacts to public access, recreation and coastal resources.
- **3.1.7-3.** Continue to limit the number and frequency of temporary events in the coastal zone held from the Memorial Day weekend to Labor Day.
- **3.1.7-4.** Require a coastal development permit for temporary events held in the coastal zone that meet all of the following criteria:
 - 1. Held between the Memorial Day weekend and Labor Day;
 - 2. Occupy any portion of a public sandy beach area; and
 - 3. Involve a charge for general public admission where no fee is currently charged for use of the same area.

A coastal development permit shall also be required for temporary events that do not meet all of these criteria, but have the potential to result in significant adverse impacts to public access, recreation and/or coastal resources.



Peninsula Park

3.1.8 Temporary Closures



Independence Day crowds in West Newport

For many years, large crowds have been drawn to the streets of West Newport during the Independence Day holiday. The partv atmosphere that pervades the area attracts these crowds. Large parties are held at many of the rental homes in the area, which often extend into the front yards and balconies, and even onto rooftops. The large crowds, the consumption of alcohol and the interaction between partygoers and

the crowds in the streets has

resulted in an average of over 170 arrests and over 1.350 citations each year. The potential for a serious outbreak of violence exists throughout the daylight hours and increases dramatically in the evening. This environment dissuades visitors and residents from enjoying the beach or bay during Independence Day.

The City has tried to reduce illegal drinking and minimize the potential for violence by significantly increasing the number of police and temporarily closing certain streets to pedestrians and visitors. The street closures do not restrict access to the beach but do function to fragment the crowds and reduce the number of people parading along Seashore Drive – an area where most arrests are made. The street closures are temporary – typically lasting less than twenty-four hours.

- 3.1.8-1. Pursuant to the Section 21101 of the Vehicle Code, the City may adopt rules and regulations regarding the temporary closing of portions of any street for celebrations, parades, local special events, and other purposes when necessary for public safety.
- 3.1.8-2. The City may temporarily close certain streets in West Newport for a period of no more than twenty-four hours during the Independence Day holiday when, in the opinion of the Police Chief or his designee, the closure is necessary to protect the public safety. In no event shall any street closure prevent or interfere with the public's access to the beach or bay.

3.2 Recreation and Support Facilities

Coastal Act policies related to recreation and support facilities that are relevant to Newport Beach include the following:

30212.5. Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

30213. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

30220. Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

30221. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

30222. The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

30223. Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

30252. The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

3.2.1 Recreational Opportunities

Throughout its history, Newport Beach has been a major recreational center. There are over 8 miles of sandy beaches that provide opportunities for sunbathing, volleyball, swimming, surfing, windsurfing and other recreational activities. Beach attendance averages 9.4 million people annually. Newport Bay and Harbor are used for a wide variety of recreational activities, including boating, diving, excursions, fishing, kayaking, paddle boarding, parasailing, rowing, sailing, swimming, and windsurfing.

The City provides approximately 180 acres of public parks in the coastal zone (see Coastal Access and Recreation Map). These parks provide areas and facilities for a variety of recreational activities. The City also provides two recreational piers. The 800-foot Newport Pier is located at the end of Newport Boulevard (McFadden Place) in McFadden Square.



Beach near Balboa Pier

The 950-foot Balboa Pier is located at the end of Main Street in Balboa Village. The City also provides ten public docks in the harbor, which can be used for boat launching and fishing. The City and County also co-own the Newport Aquatic Center. Located on Northstar Beach, the Newport Aquatic Center provides an opportunity for the public and members to kayak and canoe in Upper Newport Bay as well as advanced training facilities for world-class athletes.

The County and the State also operate recreational areas in Newport Beach. The County's 100-acre Newport Dunes Aquatic Park provides opportunities for camping, boating, canoeing, kayaking, swimming and other water and beach activities. The 752-acre Upper Newport Bay Marine Park and 140-acre Upper Newport Bay Nature Preserve provide opportunities for canoeing, kayaking, horseback riding, biking, and hiking.

Commercial areas adjacent to beaches and the bay play an important role in providing and enhancing recreational activities in the coastal zone. A large number of businesses provide recreational services to residents and visitors of the coastal zone. These include charter, entertainment and excursion vessels, sports equipment rentals, launching facilities, amusement facilities, and shops and restaurants.

- **3.2.1-1.** Protect, and where feasible, expand and enhance recreational opportunities in the coastal zone.
- **3.2.1-2.** Continue to provide opportunities for a wide range of recreational activities at City parks and beaches.
- **3.2.1-3.** Provide adequate park and recreational facilities to accommodate the needs of new residents when allowing new development.
- 3.2.1-4. Continue to cooperate with the State Department of Parks and Recreation, the State Department of Fish and Game, and Orange County to protect, expand and enhance opportunities for recreational activities at County and State beaches and parks.
- **3.2.1-5.** Continue to allow recreational commercial uses in commercial areas adjacent to beaches and the bay.

3.2.2 Support Facilities and Services

Newport Beach provides abundant coastal access and recreational opportunities. However, it is equally important to provide adequate support facilities and services to enable the public to fully avail themselves of these opportunities. Support facilities include parking, restrooms and showers. Support services include lifeguard services and instruction and education programs. It is also important that such facilities and services be well distributed throughout the area to avoid overcrowding or overuse by the public (see Support Facilities Map).

The lack of informational signage to direct the public to support facilities can impede public access. Many of Newport Beach's smaller beaches are difficult to find and access to some coastal areas is not easily apparent due to intervening topography or development. Furthermore, coastal visitors seeking support facilities can impact residents and coastal resources. For example, coastal visitors searching for parking areas contribute to traffic congestion and noise. Visitors sometimes damage habitats and bluffs to reach coastal areas when paths or trails are not clearly identified. A comprehensive coastal access signing program will reduce these impacts and ease conflicts between property owners and coastal visitors.

Parking

West Newport. West Newport has over a mile and a half of wide sandy public beaches. Public parking is provided primarily by 240 spaces at West Newport Park and by on-street parking in the residential neighborhoods, including an average of two on-street parking spaces at beach street-ends between 36th Street and Summit Street.

Balboa Peninsula. The Balboa Peninsula has over three miles of wide public beaches and several smaller bay beaches. There are over 7,400 public parking spaces, over half of which are



Parking lot in West Newport Park

on-street. The rest are in municipal lots, including 400 spaces in the McFadden Place/Newport Pier lots and 650 spaces in the Balboa Pier lot.

<u>Balboa Island</u>. Balboa Island has approximately 8 acres of public beaches around the island. Public parking is provided exclusively by on-street spaces.

<u>Corona del Mar</u>. Corona del Mar has the Corona del Mar State Beach and Little Corona, China Cove, and Rocky Point beaches. Public parking is provided primarily by the 540-space parking lot at the Corona del Mar State Beach and on-street parking on Ocean Boulevard.

<u>Upper Newport Bay.</u> Public parking for the Upper Newport Bay area is provided at various recreation areas around the bay. The North Star Beach facility provides an 80-space parking lot. The Upper Newport Bay Nature Preserve provides a parking area with approximately 103 spaces and on-street parking is also available on University Drive and Bayview Way. The parking for The Lookout at the corner of Back Bay Drive and Eastbluff Drive is provided on-street at Eastbluff Drive. The Newport Dunes Aquatic Park provides 784 day use parking spaces; approximately 70 spaces are planned at the Back Bay Science Center at Shellmaker Island.

Recreation and Convenience Facilities

Newport Beach provides a number of recreational facilities to enhance the enjoyment of the beaches, bay, and coastal parks. At the beaches, between 65 and 75 beach volleyball courts are typically provided and play courts and/or sports fields are provided at West Newport Park. Channel Place Park, Newport Island Park, 38th Street Park, Las Arenas Park, Newport Elementary School, and at the Balboa Island Community Center. Turf areas and/or playground equipment are also provided at most coastal parks. County's Newport Dunes Aquatic Park also provides recreational facilities.



Picnic tables near Newport Pier

Newport Beach provides a number of facilities for the convenience of residents and coastal visitors. At the beaches, picnic facilities are provided at West Newport Park, the Newport Pier area, 15th Street Beach, the Balboa Pier area, West Jetty Park, Las Arenas Park, and Corona del Mar State Beach. Barbecues are provided at Channel Place Park, Newport Island Park, Veteran's Memorial Park, Peninsula Park, and Corona del Mar State Beach. In addition, approximately 70 fire rings are provided in the Balboa Pier area and Corona del Mar State Beach.



Restroom and shower facilities at Balboa Pier

Beach restrooms are provided at Newport Pier, 15th Street Beach, Balboa Pier, Balboa Village, Las Arenas, Corona del Mar State Beach, and Little Corona Beach. On Balboa Island, restrooms are provided at the ferry landing, the community center, and at the fire station on Marine Avenue. Restroom facilities are also provided at most active coastal parks. Most beach restroom facilities include showers. Additionally, freestanding showers are provided at Newport Pier and 15th Street Beach. Restroom and/or shower

facilities are also provided at the County's Upper Newport Bay Nature Preserve, and at the Newport Dunes Aquatic Park.

Services and Programs

Newport Beach is regarded as having one of the finest lifequard services in the world. In 2003, Newport Beach provides 16 fulltime lifequards and 180 seasonal lifeguards operating out of up to 40 lifeguard towers. The lifeguard fleet consists of 13 trucks and 3 rescue boats. Newport Beach lifeguards average 4,100 rescues, 83,000 preventative actions, 3,400 medical aid calls, and 570 lost person calls each vear.

The Junior Lifeguard Program continues to be the most popular program during the summer months, drawing about 1,200 participants each year. It has provided training invaluable in water safetv practices and rescue techniques to over 20.000 youths since its inception in 1983. and is a prime source for identifying future lifeguards.

Newport Beach offers "beach camps" for children in the summer months, allowing children from all communities to enjoy a week at the beach. Also countless day camps visit the beaches for their field trips. Newport Beach also provides instruction



Junior Lifeguard training

in a number of coastal recreation activities, including volleyball, surfing, and sailing. In 2003, Newport Beach has a fleet of 14 Sabots and 3 Lidos, which are used to teach over 200 children a year to sail. Newport Beach also conducts volleyball and surfing tournaments.

Educational and Interpretative Facilities

The City, County, and private organizations provide several coastal-related educational and interpretative facilities and programs.

Located in the Upper Newport Bay Nature Preserve, the Muth Interpretative Center is a 10,000 square foot educational facility, which provides exhibits and programs on the ecology of the Upper Newport Bay. The Back Bay Science Center planned for Shellmaker Island will include exhibits for water quality education and research programs and ecological interpretive stations.

Located on a replica of a Delta paddlewheeler, the Newport Harbor Nautical Museum Marine provides exhibits and programs on the nautical heritage of Newport Harbor, Southern California and the Pacific Region.



Tide pool excursion at Little Corona

The Little Corona tide pools in the Newport Beach Marine Conservation Area receives thousands of visitors each year. The Little Corona tide pools are managed by the Newport Beach's Tidepool Ranger program. Tidepool Rangers are trained volunteers who educate and interact with visitors to the tide pools. Tidepool Rangers inform visitors of the rules and regulations of the Marine Conservation Area and protect tide pool resources.

The great number and variety of support facilities and services reflects Newport Beach's commitment to protecting and enhancing public coastal access and recreational opportunities. However, changes in demographics and recreational interests have and will continue to alter the public's demand for support facilities and services. Therefore, it is important that Newport Beach continue to have the ability to respond to these changes while continuing to provide comparable facilities and levels of service.

- **3.2.2-1.** Continue to protect public coastal access recreational opportunities through the provision of adequate support facilities and services.
- **3.2.2-2.** Distribute support facilities and services in coastal areas to avoid overcrowding and overuse by the public.
- **3.2.2-3.** Maintain the ability to distribute, remove and relocate support facilities and services in coastal areas in response to changes in demographics and recreational interests while continuing to provide comparable facilities and levels of service.
- 3.2.2-4. Develop parking management programs for coastal zone areas to minimize parking use conflicts between commercial uses, residential uses, and coastal zone visitors during peak summer months.
- 3.2.2-5. Continue to cooperate with the State Department of Parks and Recreation, the State Department of Fish and Game, Orange County, and private organizations to protect, expand and enhance support facilities and services at County and State beaches and parks.
- **3.2.2-6.** As part of a uniform coastal access signing program, provide information to direct the public to parking areas, restrooms, and other support facilities.



3.2.3 Access for Persons with Disabilities

People with disabilities that limit their mobility require special improvements in order to be afforded access to coastal resources. Newport Beach is working to ensure that persons with disabilities have access to coastal areas through the retrofitting of existing public facilities or the construction of new facilities.

West Newport/Balboa Peninsula. With relatively level terrain, West Newport and the Balboa Peninsula provide a good point of coastal access for people with disabilities. Parking spaces for the disabled are provided at West Newport Park, the Newport Pier, and the Balboa Pier. Accessible restrooms are also provided at these locations. The Oceanfront Boardwalk provides a smooth level pathway along the beach for almost the entire length of the peninsula. Newport Pier and Balboa Pier are also accessible and have smooth concrete decks.

Hard surface pathways are provided at 11th Street, 12th Street, Orange Street, and Island Avenue. These pathways extend oceanward to allow a view of the surfline by persons in wheelchairs. Sidewalks along the perimeter of parking lots at Newport Pier



Island Avenue disabled access

and Balboa Pier and at the Newport Elementary School playground also provide access near the surfline. Newport Beach also provides beach wheelchairs at the lifeguard headquarters at Newport Pier.

<u>Upper Newport Bay.</u> Castaways Park is accessible, with parking spaces and restrooms for the disabled provided at Bob Henry Park. Castaways Park has trails and overlooks that provide panoramic views of the Newport Bay and the Pacific Ocean. Parking spaces for the disabled are provided at the Newport Aquatic Center. The Newport Aquatics Center provides recreation and launching facilities.

At the Upper Newport Bay Nature Preserve, parking spaces and restrooms for the disabled are provided at the Muth Interpretative Center. The Muth Interpretative Center also hosts many wheelchair-accessible programs, including walks with local naturalists and campfire events for families.

The Newport Dunes Aquatic Park also provides access to the Upper Newport Bay. Parking spaces and restrooms for the disabled are provided and all buildings and boardwalks are accessible.

The Upper Newport Bay is also accessible via Back Bay Drive, which provides

access to and along the easterly side of the bay. Parking spaces and restrooms for the disabled are provided at the Newport Dunes Aquatic Park.

<u>Balboa Island</u>. Public parking is limited to on-street spaces. The Bay Front Boardwalk is accessible most of the way around the island; however, a low sea wall separates the walkway from the beaches. Accessible public restrooms are provided at the Balboa Island Fire Station on Marine Avenue and the ferry landing.

Corona del Mar. Parking spaces for the disabled are provided at Corona del Mar State Beach parking lot. A paved pathway is provided on top of the East Jetty and allows views of the harbor entrance and the ocean. Both restroom buildings are accessible. A beach wheelchair is also provided at the lifeguard facility.



Lookout Point and Inspiration Point view parks are also accessible and

Inspiration Point

provide spectacular views of the harbor entrance and Pacific Ocean.

- 3.2.3-1. Ensure that planned public facilities include provisions for adequate access for the persons with disabilities and that existing facilities are appropriately retrofitted to include such access as required by the Americans with Disabilities Act in a manner consistent with the protection of coastal resources.
- **3.2.3-2.** Continue to provide beach wheelchairs commensurate with demand.
- **3.2.3-3.** Design guardrails on piers, trails, and public viewing areas to take into consideration the views at the eye level of persons in wheelchairs.
- **3.2.3-4.** Encourage the State Department of Parks and Recreation, the State Department of Fish and Game, and Orange County to provide accessible facilities at County and State beaches and parks.

3.3 Vessel Launching, Berthing, and Storage

Coastal Act policies related to vessel launching, berthing and storage that are relevant to Newport Beach include the following:

30224. Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

30234. Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

30234.5. The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.

Newport Harbor is the largest small craft harbor in the United States with over 9,000 boats at 2,119 commercial slips and side ties, 1,221 bay moorings, and 1,230 piers. Newport Beach recognizes the importance of protecting and enhancing services and facilities that are essential to a working harbor.

3.3.1 Vessel Launching

Vessel launching refers to areas or facilities where vessels may be placed into and retrieved from the water. This could be as simple as hand-carried boat launching at a beach, or involve structures, such as ramps and docks, or equipment such as cranes, lifts, and hoists.

Newport Harbor provides a variety of locations and facilities for vessel launching. A public trailer launching facility with 7 lanes is located at the Newport Dunes Aquatic Park. Hand carried boat

Newport Bay/Harbor

The terms "Newport Bay" and "Newport Harbor" are often used interchangeably. Newport Bay is an estuary consisting of the Lower Newport Bay (south of Pacific Coast Highway) and the Upper Newport Bay (north of Pacific Coast Highway). Newport Harbor generally refers to all the water area within Lower Newport Bay and within the Upper Newport Bay, exclusive of the Upper Newport Bay Marine Park.

launching is permitted at Newport Aquatic Center at North Star Beach, the Orange County Harbor Patrol facility, and at 21 street end beaches on the Balboa Peninsula and 22 street end beaches on Balboa Island.

Vessel launching facilities are provided at the Orange Coast College David A. Grant Collegiate Rowing Center and the Boy Scout Sea Base in association with their programs. Private vessel launching sites are also provided at commercial marinas and boat yards. Yacht clubs and boating associations also provide vessel launch sites for their members.

Policies:

- 3.3.1-1. Protect, and where feasible, expand and enhance vessellaunching facilities in Newport Harbor.
- 3.3.1-2. Protect, and where feasible, expand and enhance low-cost public launching facilities, such as trailer launch ramps, boat hoists, commercial landing facilities, and



19th Street public dock

organized recreational boating launch facilities.

3.3.1-3. Develop and implement a signage program to assist boat owners/operators and the public to locate public launching facilities.

3.3.2 Berthing and Storage

Berthing refers to areas or facilities intended for the storage of a vessel in water. These can involve anchorage and mooring areas, marinas, or individual slips. In addition to the simple docking or mooring of vessels by their owners, berthing can also be associated with boat rentals, vessels used in the charter boat industry, brokered vessels stored for sale, yacht and sailing clubs, and vessels staged for entry into upland shipyards.



Offshore moorings

Newport Beach provides over 1,200 bay moorings in the harbor. Approximately 450 are onshore moorings (moorings linked to the beach) and 750 are offshore moorings (moorings anchored into the Harbor floor). The County Harbor Department provides a guest mooring area offshore of the Harbor Patrol facility.

Anchorages are water areas outside of navigation channels designated for the temporary anchorage of vessels, using their own anchoring tackle. A free public anchorage area is provided off of Lido Isle.

Newport Harbor has 16 marinas providing over 2,100 slips. The 172-slip Balboa Yacht Basin is city-owned and operated. Guest slips are provided at the Orange County Harbor Patrol facility and at several commercial marinas.

Newport Beach also provides 5 public docks on the Balboa Peninsula and 5 public docks on Balboa Island for loading and unloading passengers, supplies, and boating gear and for similar purposes. A guest dock is also planned for the Rhine Wharf.

A large number of vessels are berthed at piers. Most of Newport Harbor's over 1,200 piers are connected to residential properties. Commercial piers are used primarily to berth charter, entertainment, and excursion vessels and vessels for sale or rent.



The Rhine Channel

Dry storage of vessels is on-land storage of vessels including vessels normally stored in open or enclosed rack structures, on trailers, on cradles, on boat stands, or by other means. Commercial dry storage facilities are provided at the Newport Dunes Aquatic Park and at some boat yards. Some yacht clubs, boating associations, and community associations provide dry storage for their members.

- **3.3.2-1.** Provide a variety of berthing opportunities reflecting State and regional demand for slip size and affordability throughout Newport Harbor.
- **3.3.2-2.** Protect, and where feasible, enhance and expand marinas and dry boat storage facilities.

- **3.3.2-3.** Continue to provide shore moorings and offshore moorings as an important source of low-cost public access to the water and harbor.
- **3.3.2-4.** Provide anchorages in designated areas, which minimize interference with navigation and where shore access and support facilities are available.
- 3.3.2-5. Continue to enforce the ordinances that require moored and docked vessels to be seaworthy and navigable and thereby preserve the positive image of the harbor and promote public use of the water.
- 3.3.2-6. Protect, and where feasible, enhance and expand guest docks at public facilities, yacht clubs and at privately ownedmarinas, restaurants and other appropriate locations.



11th Street boat launch and onshore moorings

3.3.2-7. Protect, and where feasible, expand and enhance facilities and services for visiting vessels, including public mooring and docking facilities, dinghy docks, guest docks, club guest docks, pump-out stations and other features, through City, County, and private means.

3.3.3 Harbor Support Facilities

Harbor support facilities are uses, equipment, and vessels that provide repair, maintenance, new construction, parts and supplies, fueling, waste removal, cleaning, and related services to vessels berthed in, or visiting the harbor. Harbor support facilities are considered essential to maintaining a working harbor.

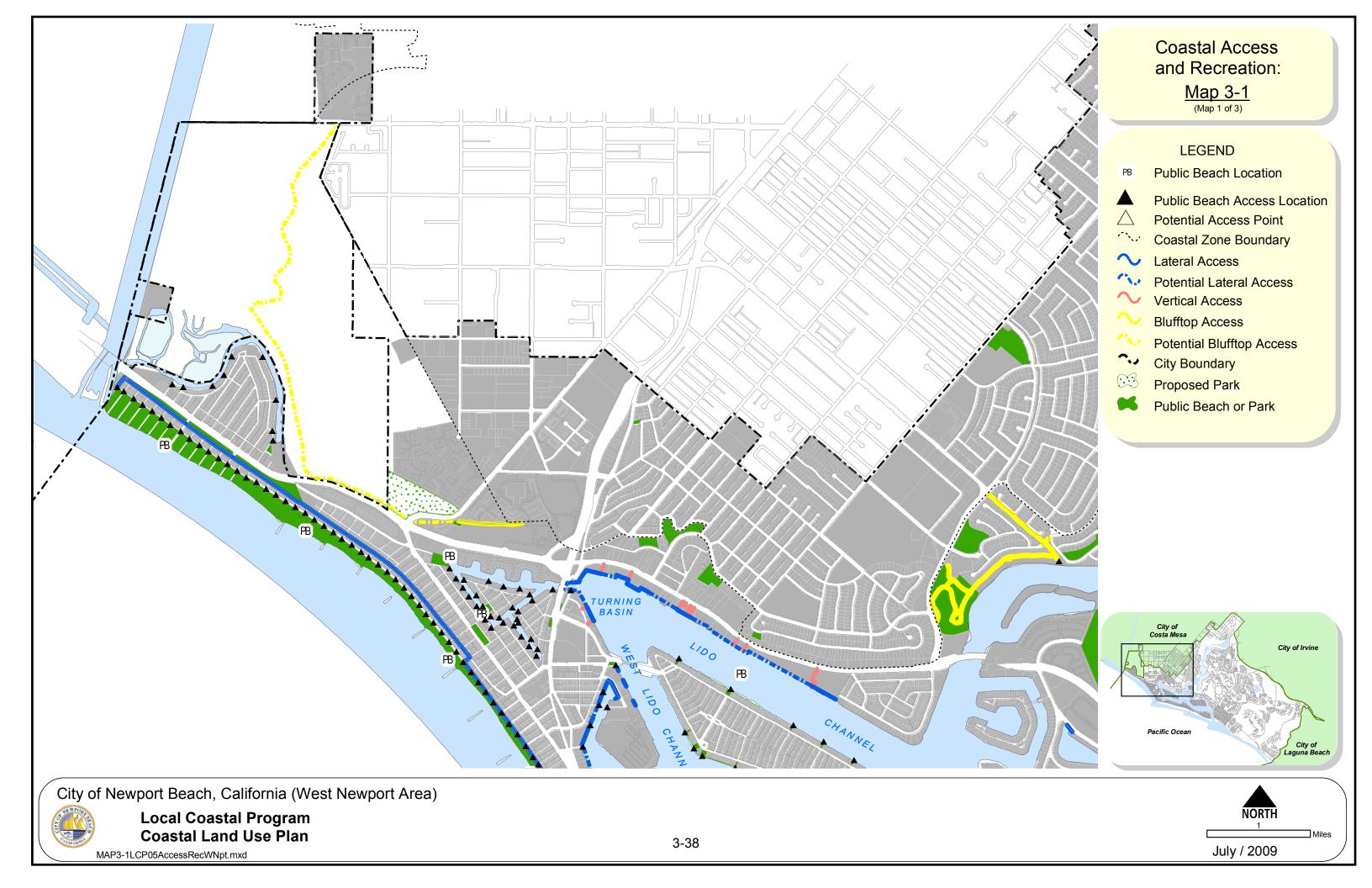
Increased environmental regulation and real estate price inflation in coastal communities have impacted a number of harbor support businesses. Those businesses that do not have to be on the water have moved to inland locations. Those that are more water dependent have been involved in land use conflicts with residential and other land uses. Newport Beach has used land use controls as the primary method to provide for the continuation of harbor support uses and minimize land use conflicts. However, additional strategies and incentives may be necessary to protect these facilities.

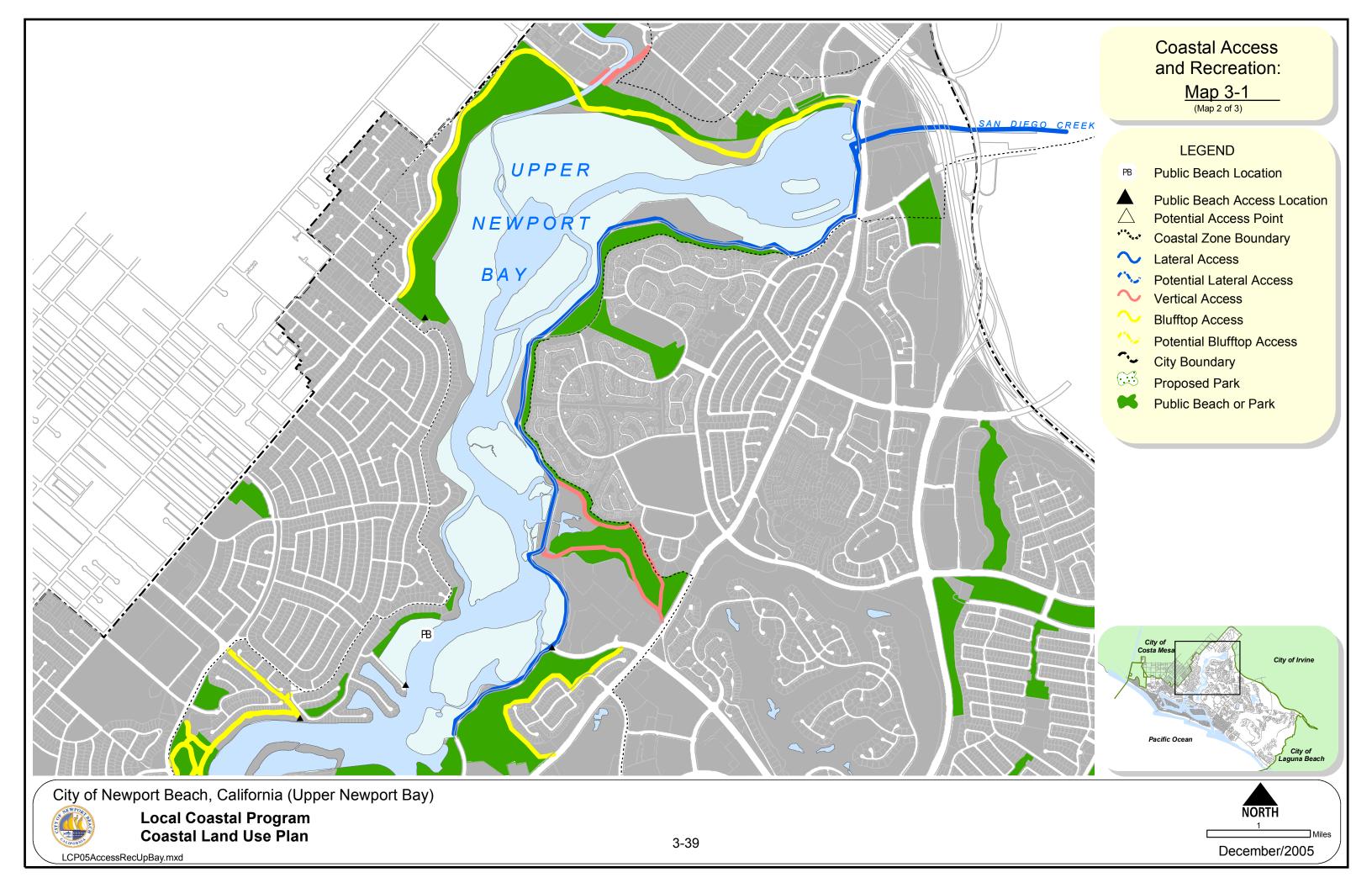


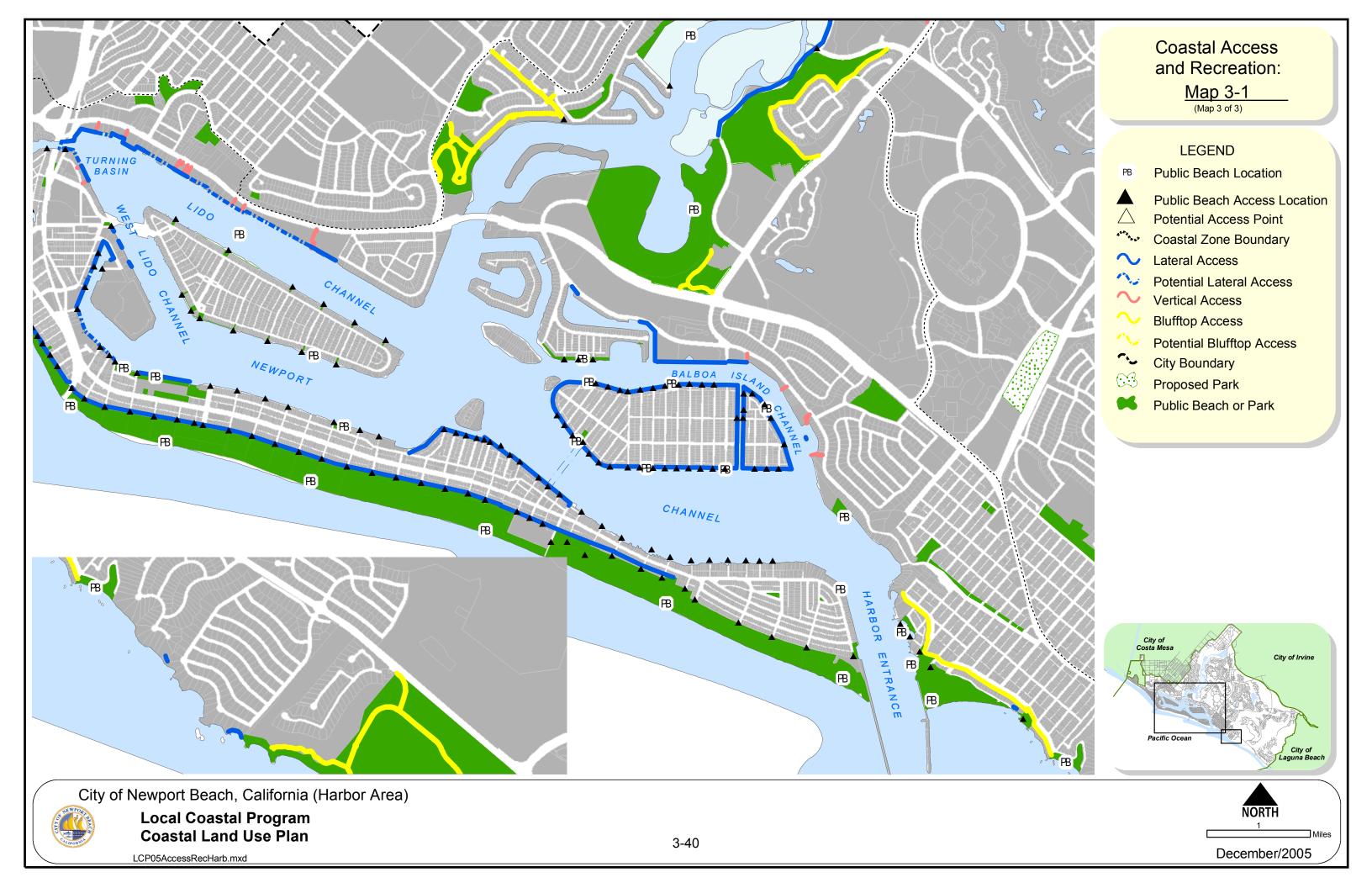
Marine service station

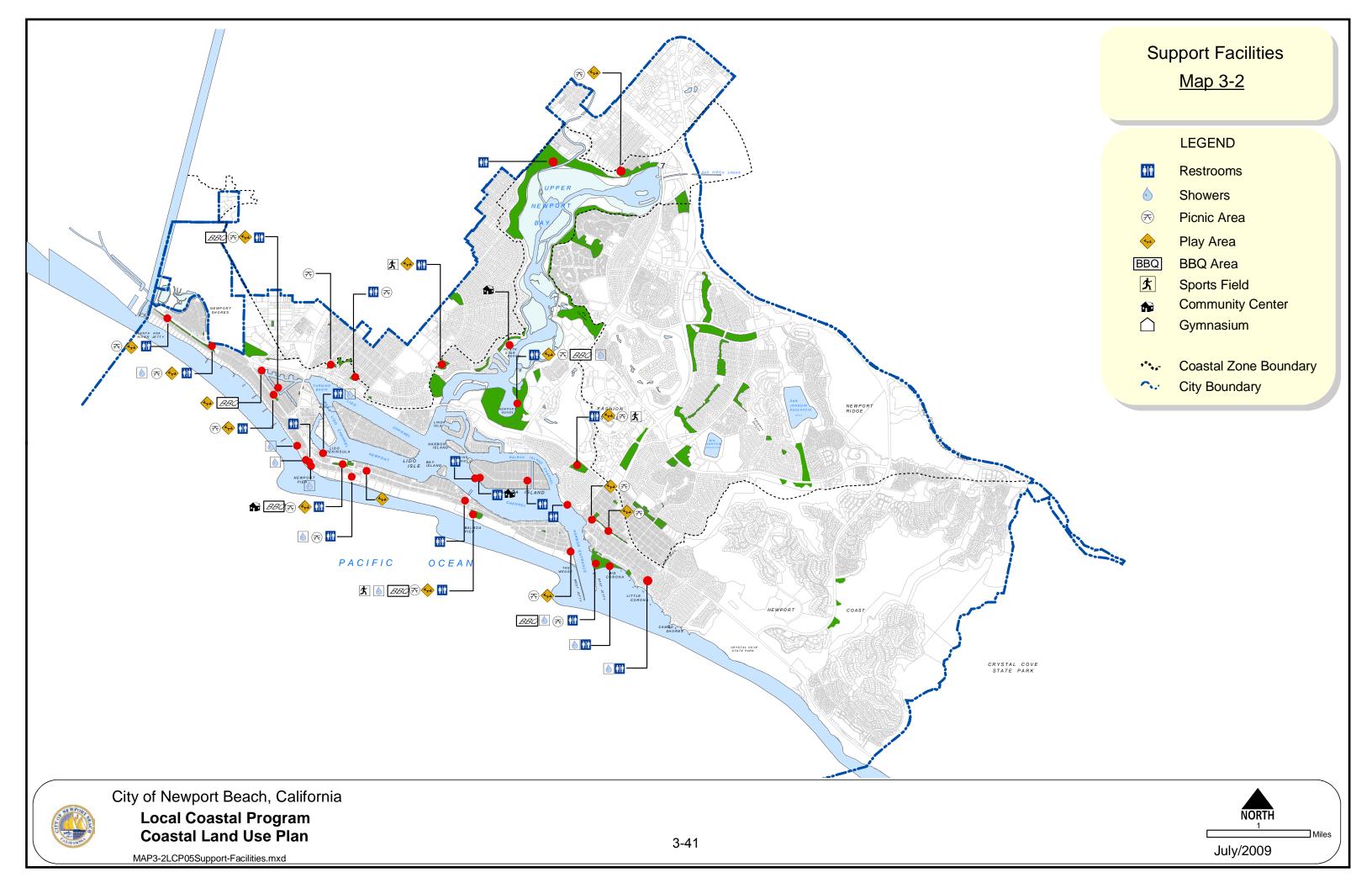
Policies:

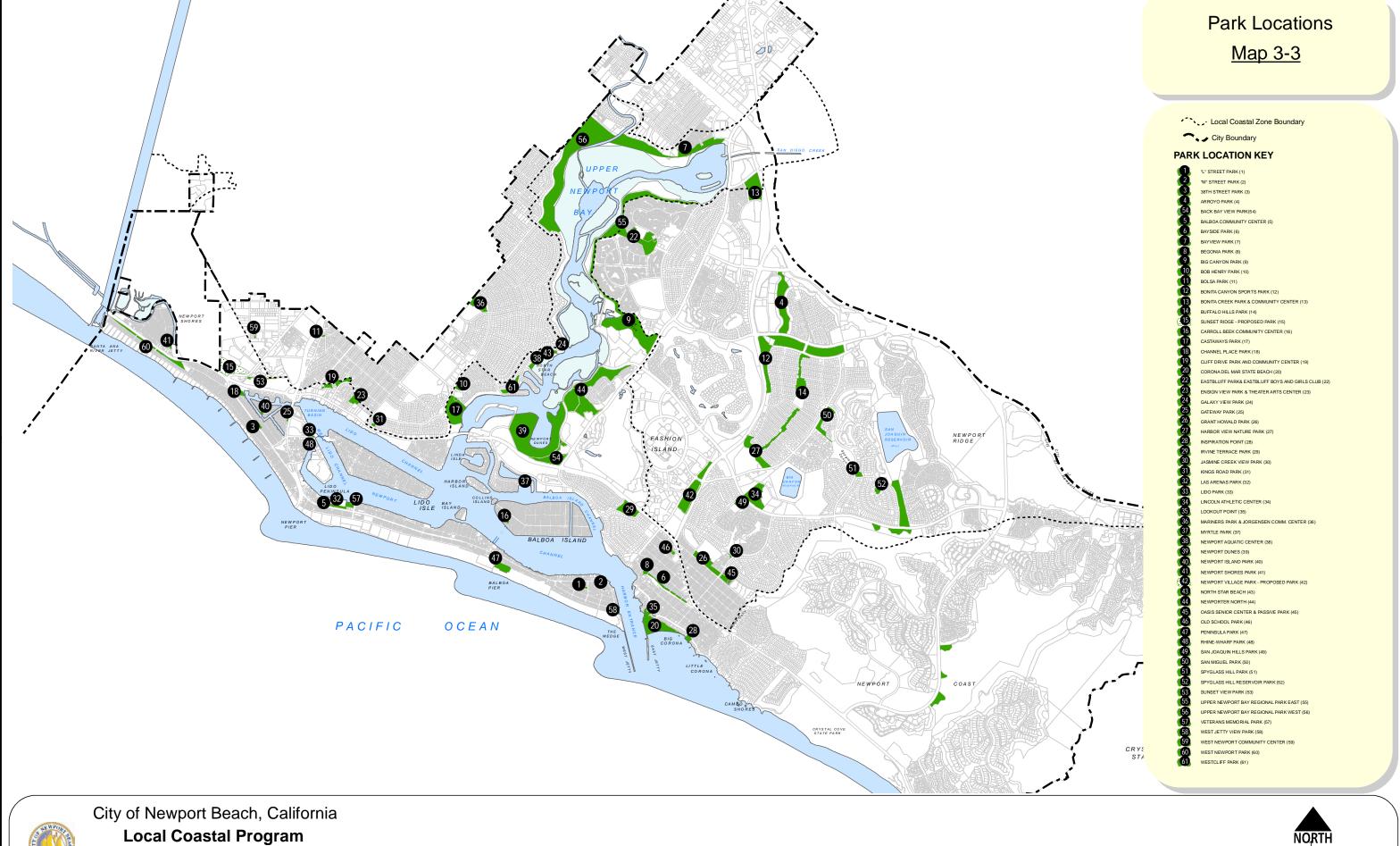
- **3.3.3-1.** Protect, and where feasible, expand and enhance facilities necessary to support vessels berthed or moored in the harbor, such as boat haul out facilities.
- **3.3.3-2.** Protect, and where feasible, expand and enhance existing harbor support uses serving the needs of existing waterfront uses, recreational boaters, the boating community, and visiting vessels.
- 3.3.3-3. In considering the essential nature of land uses that support the harbor, consider whether or not such support uses can be relocated to inland locations and/or if technological advances will eliminate the need such support uses in the foreseeable future.
- **3.3.3-4.** Support private sector uses, such as vessel assistance, that provide emergency, environmental enhancement and other services that are not provided by the public sector and that are essential to the operation of a working harbor.
- **3.3.3-5.** Develop strategies to preserve uses that provide essential support for the vessels berthed or moored in the Harbor.
- **3.3.3-6.** Develop and implement a signing program to assist owners/operators of visiting vessels to locate harbor support facilities.







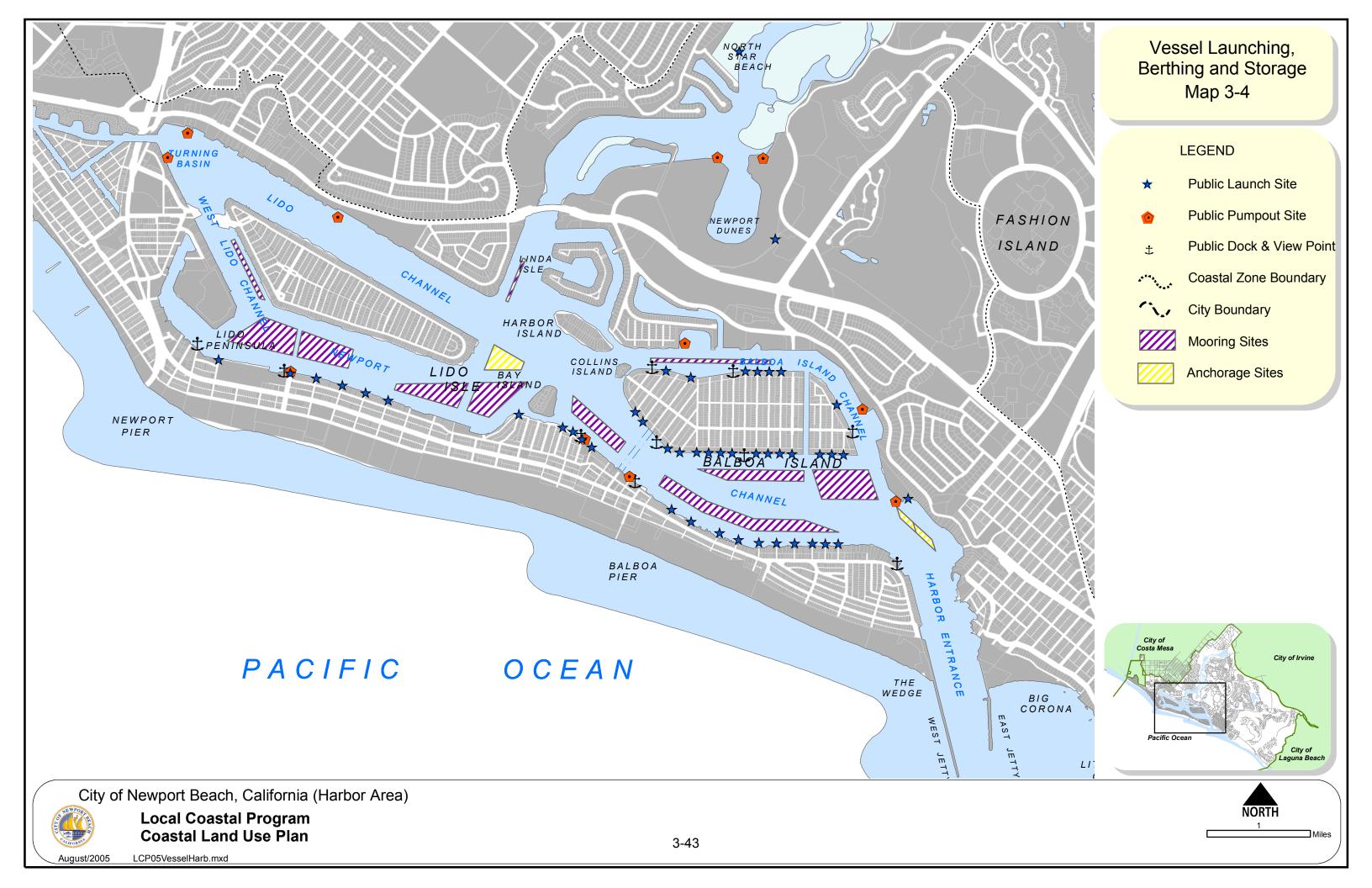




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4.0 Coastal Resource Protection

4.1 Biological Resources

Coastal Act policies related to biological resources that are relevant to Newport Beach include the following:

30230. Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

30240. (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

4.1.1 Environmentally Sensitive Habitats

Section 30107.5 of the Coastal Act "environmentally sensitive area" as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments." Section 30240 of the Coastal Act requires that environmentally sensitive habitat areas (ESHAs) be protected against any significant disruption of habitat Only uses dependent on those resources are allowed within



Upper Newport Bay Marine Park

ESHAs and adjacent development must be sited and designed to prevent impacts that would significantly degrade the ESHA and must be compatible with the continuance of the ESHA.

The Coastal Act criteria for determining whether an area qualifies as an ESHA are based upon ecological importance, including the rarity or function of the habitat,

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and the habitat's sensitivity. Rarity relates to either the natural limited occurrence of the habitat in the region or of the diminishment of what was an extensive habitat due to cumulative losses. Function relates to the importance of the habitat to the ecosystem, such as functioning as a migration corridor for wildlife. Sensitivity relates to the habitats tolerance to disturbance or degradation.

The following terrestrial (non-marine) natural communities are known to occur within the coastal zone in Newport Beach and the City's sphere of influence:

- Dune habitats, including southern coastal foredunes and southern dune scrub.
- Scrub habitats, including southern coastal bluff scrub, maritime succulent scrub, and Diegan coastal sage scrub.
- Chaparral habitats, including southern mixed chaparral and southern maritime chaparral.
- Riparian habitats, including southern willow scrub, southern coast live oak riparian forest, southern cottonwood willow riparian forest, southern arroyo willow forest, southern black willow forest, and southern sycamore alder riparian woodland.
- Marsh habitats, including coastal brackish marsh, coastal freshwater marsh, and southern coastal salt marsh.
- Southern coastal needlegrass grassland.
- Southern hardpan vernal pools.
- Freshwater seeps.
- Alkali meadows.

The California Department of Fish and Game's (CDFG) "List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database" (CNDDB) provides an inventory of California's natural communities and identifies those that are considered rare because of their highly limited distribution. These rare communities may or may not contain individual species that are rare, threatened, or endangered.

In determining whether a habitat area meets the statutory definition of ESHA contained in Section 30107.5 of the Coastal Act and should be designated as an ESHA, the following attributes need to taken into consideration:

- The presence of natural communities that have been identified as rare by the California Department of Fish and Game.
- The recorded or potential presence of plant or animal species designated as rare, threatened, or endangered under State or Federal law.
- The presence or potential presence of plant or animal species that are not listed under State or Federal law, but for which there is other compelling evidence of rarity, such as designation as a 1B or 2 species by the California Native Plant Society.
- The presence of coastal streams.
- The degree of habitat integrity and connectivity to other natural areas.

Several of the natural communities that occur in Newport Beach are designated rare by the CDFG and are easily disturbed or degraded by human activity and therefore are presumed to meet the definition of ESHA under the Coastal Act. These include southern dune scrub, southern coastal bluff scrub, maritime succulent scrub, southern maritime chaparral, southern willow scrub, southern cottonwood willow riparian forest, southern arroyo willow forest, southern black willow forest, southern sycamore alder riparian woodland, and southern coastal purple needlegrass grassland.

Although not all riparian habitat types are rare throughout the state, in southern California over 90% of the original riparian habitats had been lost to development by 1989. All remaining native riparian habitats in southern California, including southern coast live oak riparian forest, meet the definition of ESHA both because of their rarity and because of their important roles in the ecosystem. For example, many species of birds nest and roost in riparian habitat but forage in adjacent coastal sage scrub and chaparral.

Another important habitat within the City of Newport Beach is coastal sage scrub (CSS). Although CSS has suffered enormous losses in California (estimates are as high as 85%), there are still thousands of acres in existence and this community type is no longer listed as rare by CDFG. Nevertheless, where CSS occurs adjacent to coastal salt marsh or other wetlands, or where it is documented to support or known to have the potential to support rare species such as the coastal California gnatcatcher, it meets the definition of ESHA because of its especially valuable role in the ecosystem. CSS is important transitional or "edge"

habitat adjacent to saltmarsh, providing important functions such as supporting pollinators for wetland plants and essential habitat for edge-dependent animals like several species of butterflies that nectar on upland plants but whose caterpillars require wetland vegetation. CSS also provides essential nesting and foraging habitat for the coastal California gnatcatcher, a rare species designated threatened under the Federal Endangered Species Act.

Wetland habitats with the City of Newport Beach that may meet the definition of ESHA include coastal brackish marsh, coastal freshwater marsh, southern coastal salt marsh, southern hardpan vernal pools, freshwater seeps, and alkali meadows.

Areas within the City of Newport Beach that are dominated by one of the habitats discussed above are presumed to be ESHA, unless there are strong site-specific reasons to rebut that presumption. Factors that should be considered when making site-specific assessments include:

- Patch size and connectivity. Very small patches of habitat that are effectively isolated from other natural areas may lose many of their natural ecological functions. Functional patch size is dependent upon both the ecological needs of the species of importance supported by the habitat and the spatial scale of the habitat. For example, what is isolated for a small mammal may not be for a bird and what is small for a coyote may not be for some insects.
- Dominance by invasive, non-native species. Non-native species often provide poorer habitat for wildlife than native vegetation and proliferation of exotic plant species alters ecosystem processes and may threaten certain native species with extirpation. However, there are probably no habitats in southern California that have not been invaded by exotic species, and the remaining stands of native grassland are almost always dominated by non-native annual species. Only where exotic species are so overwhelmingly dominant that the native community can no longer perform its functions in the ecosystem should the presence of exotic species rebut the presumption of ESHA.
- Disturbance and proximity to development. Disturbance is the negative effect of human activities such as dumping, vegetation removal, development, pollution, etc. Habitat areas bordering development may be subject to impacts from negative edge effects, such as lighting, non-native invasive plant species, domestic animals, and human activity. The negative effects of disturbance are strongest immediately adjacent to development and decline with distance from the edge. However, where very small patches of habitat are effectively surrounded by development, these impacts may be severe. In general, disturbance by itself is not enough to

rebut the finding of ESHA. Disturbance that is clearly reversible (e.g., presence of trash or illegal dumping) is not determinative.

Fragmentation and isolation. Where there are large areas of more-or-less continuous development, native communities may be reduced to small islands of habitat that are distant from other natural habitats. This fragmentation and isolation can create barriers to migration, reduce wildlife food and water resources and generally compress territory size to reduce existing wildlife populations to non-viability. The smaller a particular habitat patch is, the greater the proportion of its area that experiences negative edge effects.

Where the habitats discussed above occur in the City of Newport Beach the presumption is that they are ESHA and the burden of proof is on the property owner or project proponent to demonstrate that that presumption is rebutted by site-specific evidence. However, if quantitative data gathered by a qualified biologist demonstrates that a habitat area is degraded beyond the point of restoration, or that it is not rare and is so small and isolated that it no longer has habitat value or a special nature or role in the ecosystem, the habitat area does not meet the statutory definition of ESHA contained in Section 30107.5 of the Coastal Act. Therefore, such habitat areas do not warrant the special land use and development restrictions established for ESHA in this Coastal Land Use Plan.

Policies:

- 4.1.1-1. Define any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments as an environmentally sensitive habitat area (ESHA). Using a site-specific survey and analysis by a qualified biologist, evaluate the following attributes when determining whether a habitat area meets the definition of an ESHA:
 - A. The presence of natural communities that have been identified as rare by the California Department of Fish and Game.
 - B. The recorded or potential presence of plant or animal species designated as rare, threatened, or endangered under State or Federal law.
 - C. The presence or potential presence of plant or animal species that are not listed under State or Federal law, but for which there is other compelling evidence of rarity, such as

designation as a 1B or 2 species by the California Native Plant Society.

- D. The presence of coastal streams.
- E. The degree of habitat integrity and connectivity to other natural areas.

Attributes to be evaluated when determining a habitat's integrity/connectivity include the habitat's patch size and connectivity, dominance by invasive/non-native species, the level of disturbance, the proximity to development, and the level of fragmentation and isolation.

Existing developed areas and existing fuel modification areas required by the City of Newport Beach Fire Department or the Orange County Fire Authority for existing, legal structures do not meet the definition of ESHA.

- 4.1.1-2. Require a site-specific survey and analysis prepared by a qualified biologist as a filing requirement for coastal development permit applications where development would occur within or adjacent to areas identified as a potential ESHA. Identify ESHA as habitats or natural communities listed in Section 4.1.1 that possess any of the attributes listed in Policy 4.1.1-1. The ESA's depicted on Map 4-1 shall represent a preliminary mapping of areas containing potential ESHA.
- **4.1.1-3.** Prohibit new development that would necessitate fuel modification in ESHA.
- **4.1.1-4.** Protect ESHAs against any significant disruption of habitat values.
- **4.1.1-5.** Design land divisions, including lot line adjustments, to preclude new development within and minimize impacts to ESHAs.
- **4.1.1-6.** Require development in areas adjacent to environmentally sensitive habitat areas to be sited and designed to prevent impacts that would significantly degrade those areas, and to be compatible with the continuance of those habitat areas.
- **4.1.1-7.** Limit uses within ESHAs to only those uses that are dependent on such resources.

- 4.1.1-8. Limited public access improvements and minor educational, interpretative and research activities and development may be considered resource dependent uses. Measures, including, but not limited to, trail creation, signage, placement of boardwalks, and fencing, shall be implemented as necessary to protect ESHA.
- **4.1.1-9.** Where feasible, confine development adjacent to ESHAs to low impact land uses, such as open space and passive recreation.
- 4.1.1-10. Require buffer areas of sufficient size to ensure the biological integrity and preservation of the habitat they are designed to protect. Terrestrial ESHA shall have a minimum buffer width of 50 feet wherever possible. Smaller ESHA buffers may be allowed only where it can be demonstrated that 1) a 50-foot wide buffer is not possible due to site-specific constraints, and 2) the proposed narrower buffer would be amply protective of the biological integrity of the ESHA given the site-specific characteristics of the resource and of the type and intensity of disturbance.
- **4.1.1-11.** Provide buffer areas around ESHAs and maintain with exclusively native vegetation to serve as transitional habitat and provide distance and physical barriers to human and domestic pet intrusion.
- **4.1.1-12.** Require the use of native vegetation and prohibit invasive plant species within ESHAs and ESHA buffer areas.
- **4.1.1-13.** Shield and direct exterior lighting away from ESHAs to minimize impacts to wildlife.
- 4.1.1-14. Require mitigation in the form of habitat creation or substantial restoration for allowable impacts to ESHA and other sensitive resources that cannot be avoided through the implementation of siting and design alternatives. Priority shall be given to on-site mitigation. Off-site mitigation measures shall only be approved when it is not feasible to fully mitigate impacts on-site. Mitigation shall not substitute for implementation of the project alternative that would avoid impacts to ESHA.
- 4.1.1-15. Apply the following mitigation ratios for allowable impacts to upland vegetation: 2:1 for coastal sage scrub; 3:1 for coastal sage scrub that is occupied by California gnatcatchers or significant populations of other rare species; 3:1 for rare community types such as southern maritime chaparral, maritime succulent scrub; native grassland and

1:1 for southern mixed chaparral. The ratios represent the acreage of the area to be restored/created to the acreage impacted.

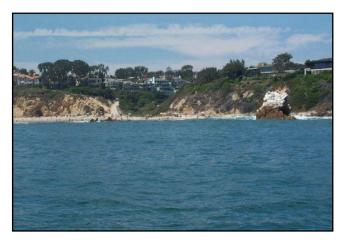
- 4.1.1-16. For allowable impacts to ESHA and other sensitive resources, require monitoring of mitigation measures for a period of sufficient time to determine if mitigation objectives and performance standards Mid-course corrections shall be implemented if are being met. necessary to meet the objectives or performance standards. Require the submittal of monitoring reports during the monitoring period that document the success or failure of the mitigation. To help insure that the mitigation project is self-sustaining, final monitoring for all mitigation projects shall take place after at least three years with no remediation or maintenance activities other than weeding. If performance standards are not met by the end of the prescribed monitoring period, the monitoring period shall be extended or the applicant shall submit an amendment application proposing alternative mitigation measures and implement the approved changes. Unless it is determined by the City that a differing mitigation monitoring schedule is appropriate, it is generally anticipated that monitoring shall occur for a period of not less than five years.
- 4.1.1-17. In conjunction with new development, require that all preserved ESHA, buffers, and all mitigation areas, onsite and offsite, be conserved/dedicated (e.g. open space direct dedication, offer to dedicate (OTD), conservation easement, deed restriction) in such a manner as to ensure that the land is conserved in perpetuity. A management plan and funding shall be required to ensure appropriate management of the habitat area in perpetuity.
- **4.1.1-18.** Require all direct open space dedications or OTDs to be made to a public agency or other appropriate entity that will manage the open space area on behalf of the public.
- **4.1.1-19.** Encourage the acceptance of direct open space dedications or OTDs to the public by the City, a public agency, a private association, or other appropriate entity.
- **4.1.1-20.** Give consideration to applying the Open Space land use category to lands with open space restrictions, dedications, or offers to dedicate.
- **4.1.1-21.** Dedicated open space areas, or areas where there are open space offers to dedicate, open space easements, and/or open space deed

restrictions shall be protected consistent with the requirements of the dedication, offer to dedicate, easement or deed restriction.

4.1.1-22. The City shall maintain an inventory of open space dedications or offers to dedicate to ensure such areas are known to the public and are protected through the coastal development permit process.

4.1.2 Marine Resources

Marine Habitats



Newport Beach Marine Conservation Area

Newport Beach and surrounding ocean waters have very diverse marine habitats. These include the marshes and wetlands in Upper Newport developed Bay, the beaches. hard channels. and (bulkheads, structures seawalls. docks, pilings, and jetties) of Lower Newport Bay, and the intertidal and subtidal landforms (sandy beaches. rocky intertidal, sandy subtidal, and subtidal reefs) along the coast of Newport Beach. Section 30230 of the Coastal Act requires that marine resources be maintained.

enhanced, and, where feasible, restored. Protection of marine habitats is required not only for their biological significance, but also for their commercial, recreational, scientific, and educational value.

Open estuary and salt marsh habitats occur in the Upper Newport Bay and the Semeniuk Slough. The Upper Newport Bay is one of the largest coastal wetlands remaining in southern California and is an ecological resource of national significance. The Semeniuk Slough is a relatively large, uninterrupted open estuary/coastal salt marsh that provide wildlife with a relatively large, diverse area for foraging, shelter, and movement. The habitats of the Semeniuk Slough and the Upper Newport Bay are discussed further in Section 4.1.3 (Environmental Study Areas).

Eelgrass (*Zostera marina*) is a marine plant that grows in Newport Harbor at depths below the low tide line and into the navigational channels. This true marine grass forms meadows and attracts many invertebrates and fishes that use the vegetation as foraging and nursery habitat. Eelgrass is discussed in more detail in Section 4.1.4 (Eelgrass Meadows) and Section 4.2.5 (Eelgrass Protection and Restoration).

The Newport Beach Marine Conservation Area is located along the Corona del Mar shoreline and extends 200 feet offshore. Numerous types of invertebrates, algae, seagrass, fishes, and seabirds occur within the limits of the refuge, and marine mammals occasionally pass through. The Newport Beach Marine Conservation Area is discussed further in Section 4.1.3 (Environmental Study Area 11).

The Newport Submarine Canyon is a unique coastal feature that begins immediately seaward of the Newport Pier at a depth of 8 meters (25 feet). Bottom depths rapidly increase to nearly 30 meters (100 feet) within 400 meters (1,200 feet) from shore and 100 meters (300 feet) deep within 1,300 meters (3,900 feet) from shore. This geological feature is believed to have been formed by the ancestral Santa Ana River, and it is the exit pathway for southward-moving sands transported through



Representation of the Newport Submarine Canyon

littoral drift currents at the end of the San Pedro Littoral Cell. In an effort to reduce the sand loss, the U.S. Army Corps of Engineers constructed six groins along West Newport to hold the sand. The groins have been partially successful. Biologically, the submarine canyon is unique because it acts as a pathway for cold, nutrient-rich waters that upwell from deeper offshore waters to the shallower nearshore shelf. Additionally, the canyon acts as a pathway through which deeper water species of fish, squid, shark, and jellyfish, sometimes can be found close to shore. The canyon is also an important fishing zone for the Dory Fishing Fleet.

Sensitive Marine Species

Several species of marine mammals frequent the nearshore waters along the Newport Beach coastline. marine mammals are protected by the Marine Mammal Protection Act. Several whales are federally listed endangered species. The marine mammals that have the greatest locally potential to occur are California (Zalophus sea lion californicus), harbor (Phoca seal vitulina), California whale gray



Sea lion on the West Jetty

(Eschrichthius robustus), killer whale (Orcinus orca), common dolphin (Delphinus delphis), bottlenose dolphin (Tursiops truncates), Pacific white sided dolphin (Lagenorhynchus obliquidens), and Dall's porpoise (Phocenoides dalli). The most common, the California gray whale, was delisted as an endangered species in 1994 because of significant increases in its population numbers in recent years. California gray whales are common between December and April, as they migrate between their summer feeding grounds in the Bering Sea and their Baja California calving lagoons. Individuals sometimes enter the Newport Harbor Entrance Channel. Pods of bottlenose dolphin are occasionally observed swimming in the surf zone or immediately outside the surf zone along the Newport coastline. California sea lions are frequently observed within Newport Harbor, particularly in the vicinity of the sports fishing boats near the Balboa Pavilion.

Although giant kelp (Macrocystis pyrifera) beds do not have official status as a sensitive habitat or resource, kelp forests afford protection and cover for many marine invertebrates and fishes. Giant kelp currently is rare within the Newport Beach and Irvine Coast Marine Conservation Areas. although historically it has occurred along the coastline between Coronal del Mar and the Newport Coast. Diebacks of kelp have occurred periodically along the southern California Coast primarily



Kelp beds and associated reef organisms in the Newport Harbor Entrance Channel

during warm water El Nino periods. However, kelp beds along the Newport to northern Laguna coastline have failed to regenerate in recent years and the reasons for this occurrence are not clear. Increases in sediment loads along the coast due to urban runoff may be a contributing factor, along with periodic large storm events that dislodge plants, sustained warmer waters temperatures during El Nino periods, and over fishing. During 2002, there were excellent conditions for giant kelp in southern California. Mild winters and cold, nutrient-rich waters enabled many kelp beds to recover naturally and rapidly. However, Orange County saw very little natural recovery. A number of giant kelp reforestation projects are being attempted in southern California, including one in the Crystal Cove State Underwater Park.

Despite the substantial declines in the distribution of giant kelp cover along the shoreline between Corona del Mar and Laguna Beach, a stand of giant kelp has maintained itself within Newport Harbor Entrance Channel, along the west jetty. The giant kelp bed is discussed further in Section 4.1.3 (Environmental Study Area 13).

Surfgrass (*Phyllospadix* spp.) is a sensitive marine resource that occurs in rocky shoreline and rocky subtidal habitats at depths to approximately –20 feet MLLW. Its sensitivity is related to its use by invertebrates and fishes as nursery habitat and its susceptibility to long-term damage because it is a very slow growing species. Revegetation occurs naturally through seeding and eventually spreading of roots and rhizomes over surfaces of rocks. Surfgrass is located within the Newport Beach Marine Conservation Area, along the outer fringes of the intertidal reefs and the tops of shallow subtidal reefs.

California grunion (*Leuresthes tenuis*) are fish that are associated with many beaches in southern California. Grunion lay their eggs in the wet beach sands during the highest spring tides between late February or early March, to as late as early September. Historically, these grunion "runs" have occurred on west-facing beaches upcoast of Newport Pier, where the beach slopes tend to be more gradual rather than south facing beaches downcoast of Newport Pier. However, there has been no recent grunion activity observed on these beaches. Grunion run activity has also occurred on Corona del Mar State Beach and Rocky Point Beach, in the Harbor Entrance mouth.

Although California halibut (*Paralichthys californicus*) does not have a formal special species status, the California halibut is considered a sensitive species by resource agencies because of its commercial value and a continued region-wide reduction of its nursery habitat in bays and wetlands. California halibut spawn at sea and the larval stages are planktonic. After several months, the larval fish settle to the bottom, and migrate into shallow coastal waters, including Newport Bay. Halibut are distributed throughout the waters of Lower and Upper Newport Bay, primarily as juveniles, although larger individuals are caught near the ocean entrance and offshore. Young-Of-The-Year (YOTY) prefer shallow waters between about –0.45 meter (1.5 feet) and –1.0 meter (3.5 feet) Mean Lower Low Water (MLLW), whereas juveniles prefer deeper channel bottoms to a maximum depth of approximately 4.5 meters (15 feet) MLLW. After spending nearly nine months in Newport Bay, juveniles will move out into the open coastal environment.

Invasive Marine Species



Caulerpa taxifolia

Caulerpa taxifolia is an extremely harmful, invasive species that has recently been introduced into southern California waters. It has been located within Huntington Harbour and in the Agua Hedionda Lagoon in northern San Diego County. This species has a characteristic bright green color, flat, leafy fern-like fronds (branches), a nd belowground root system. Caulerpa algae can be extremely harmful to marine ecosystems

because it invades and out-competes native habitats by forming a dense blanket of growth on mud, sand, or rock surfaces. It can grow in shallow coastal lagoons as well as in deeper ocean waters, and can grow rapidly and up to 9 feet in length. However, its usual form observed so far is much smaller in length.

The ecological consequences of the spread of this invasive algae can be extremely serious and can result in a significant loss of plant and animal productivity. Therefore, the spread of this species is being closely monitored and areas that have become infested are being treated chemically to eradicate any growth. The management, control, and eradication of this species is the responsibility of the Southern California *Caulerpa* Action Team (SCCAT).

Newport Bay is not currently known to be infested by this species, however, continued surveillance for undetected or new infestations is a high priority to the SCCAT. Project site surveys for the presence of *Caulerpa taxifolia* are required by NOAA and CDFG prior to bottom-disturbing projects such as dredging, dock replacement, bulkhead repair.

Assembly Bill 1334 (Chapter 338, Statutes of 2001) prohibits the sale, possession, and transport of *Caulerpa taxifolia* throughout California. The Bill also bans species of *Caulerpa* that look similar to *C. taxifolia* and are believed to have the capability to become invasive. The importation of the Mediterranean strain of *Caulerpa taxifolia* into the United States and interstate trade, including via the Internet, is also a federal offense under the Federal Noxious Weed Act of 1999 and the Plant Protection Act of 2000.

Water Quality

Runoff from the surrounding watershed threatens the biological diversity and functionality of Newport Bay and the surrounding coastal waters. This runoff includes various pollutants, such as fecal material from pets, oil and grease, fertilizers, and other urban-based pollutants. In addition, increased sediment loads decrease the extent of tidal inundation, diminish water quality, degrade habitat for endangered species, migratory water birds, and marine and estuarine fishes, and contribute to the decline of kelp forests. Water quality and sedimentation issues are discussed further in Section 4.2 (Wetlands and Deepwater Areas) and Section 4.3 (Water Quality).

Policies:

- **4.1.2-1.** Maintain, enhance, and, where feasible, restore marine resources.
- **4.1.2-2.** Provide special protection to marine resource areas and species of special biological or economic significance.

- **4.1.2-3.** Require that uses of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.
- **4.1.2-4.** Continue to cooperate with the state and federal resource protection agencies and private organizations to protect marine resources.
- **4.1.2-5.** Continue to require *Caulerpa* protocol surveys as a condition of City approval of projects in the Newport Bay and immediately notify the SCCAT when found.



Rocky intertidal reefs at Little Corona

4.1.3 Environmental Study Areas

Newport Beach has several relatively large, undeveloped areas that contain natural habitats and may be capable of supporting sensitive biological resources. These areas are designated as environmental study areas to define them geographically, provide an overview of known and potential biological resources, identify potential threats to those resources, and propose potential mitigation measures.

The following areas are designated as environmental study areas:

- 1. Semeniuk Slough (Santa Ana River Marsh)
- 2. North Star Beach
- 3. West Bay
- 4. Upper Newport Bay Marine Park and DeAnza/Bayside Marsh Peninsula
- 5. San Diego Creek

- 6. Eastbluff Remnant
- 7. Mouth of Big Canyon
- 8. Newporter North
- 9. Buck Gully
- 10. Morning Canyon
- 11. Newport Beach Marine Conservation Area
- Castaways
- 13. Kelp Beds in Newport Harbor Entrance Channel

Most of these study areas are protected as parks, conservation areas, nature preserves, and other open space areas. Nevertheless, the natural habitats in each of these study areas are subjected to various potential impacts from the surrounding urban environment. Potential adverse impacts and mitigation measures to reduce those impacts are identified in the narratives below and summarized in Table 4.1-1 (Environmental Study Area Environmental Impacts and Mitigation Measures).

Portions of the environmental study areas listed above are known to contain habitat that constitutes Environmentally Sensitive Habitat Area (ESHA). As such, they will be subject to more stringent development controls and resource protection measures. Within these study areas, those natural communities/habitats identified in Section 4.1.1 are presumed to be ESHA, unless there is compelling site-specific evidence to the contrary. As is evident from the descriptions provided below, large portions of these environmental study areas support one or more community types that meet the definition of ESHA.

Eelgrass meadows within Newport Bay and coastal foredunes on the Balboa Peninsula are not included in the list of environmental study areas since their locations shift due to fluctuations in growing conditions. Eelgrass meadows and coastal foredune habitats are discussed in Section 4.1.4 and Section 4.1.5, respectively.

Study Area No. 1: Semeniuk Slough

Semeniuk Slough is a remnant channel of the Santa Ana River from the time when the river emptied into Newport Bay; it forms a loop around the Newport Shores residential area in West Newport. The 103-acre Semeniuk Slough Environmental Study Area (ESA) includes the main slough channel immediately north of Newport Shores and the coastal salt marsh habitat to the north, including a narrow sliver of salt marsh habitat in the far north of the ESA, flanked by the Santa Ana River on the west and



Semeniuk Slough

Banning Ranch on the east. Several smaller interconnected channels and inundated depressions are located throughout the salt marsh habitat.

Semeniuk Slough is exposed to limited tidal influence through a tidal culvert connected between the Santa Ana River and the slough. The site contains a healthy stand of sensitive coastal salt water marshhabitat. The state endangered Belding's savannah sparrow (Passerculus sandwichensis beldingi) breeds in nearby wetland habitats including Upper Newport Bay and salt marsh in Huntington Beach but not in Semeniuk Slough. However, small numbers of Belding's savannah sparrows forage in Semeniuk Slough, especially during the winter when breeding birds disperse. A Belding's savannah sparrow was observed within the Semeniuk Slough site on July 10, 2002. The state and federal endangered California least tern (Sterna albifrons browni), which has a large nesting colony on the Huntington Beach side of the Santa Ana River mouth, forages occasionally in the slough channels. Western snowy plovers (federal threatened) are observed occasionally in Semeniuk Slough. The California brackish water snail (Tryonia imitator), a Federal Species of Concern, has been collected in substantial numbers in the channels of Semeniuk Slough.

The Semeniuk Slough ESA is characterized by open estuarine, southern coastal salt marsh, and ornamental plant communities. The S-curved channel, also referred to as Oxbow Loop, is bordered to the north by southern coastal salt marsh vegetation, which is dominated by pickleweed (*Salicornia* sp.) and salt grass. Most of the natural areas occur to the west of the parcel. Sea fig has invaded some of the upland portions of the parcel. Other ornamental plant species are found along the margin of the Slough, primarily in the eastern portions of the parcel and include myoporum (*Myoporum* sp.), acacia (*Acacia* sp.), Mexican fan palm, pine (*Pinus* sp.), and eucalyptus.

Many houses in the Newport Shores development bordering the slough have small docks and patios that encroach into the slough. The proximity to the Newport Shores residential development has introduced numerous ornamental and non-native species to the eastern perimeter of the site, and also allows use of the slough for recreational use. A few oil-well related structures are located in the southern part of the ESA, immediately north of the main slough channel. The land surrounding these structures has been cleared. Two roads bisect the study area one leading from the Santa Ana River levee to the Banning Ranch area, and the other leading to the oil well structures.

Potential impacts to this area include water quality degradation, human activity, encroachment, invasive species, and uncontrolled public access.

Study Area No. 2: North Star Beach

Located at White Cliffs Drive and North Star Lane, North Star Beach is bordered by the main channel of Upper Newport Bay to the east, Galaxy Drive to the north, and residential development to the south and west of the site.

The 11.6-acre North Star Beach ESA supports a small riparian area composed of southern willow scrub. Southern willow scrub is considered a sensitive habitat, and is listed as rare or threatened or is otherwise



Southern coastal bluff scrub habitat (in the background) at North Star Beach

protected by the United States Fish and Wildlife Service (USFWS), CDFG, or local agencies. Southern willow scrub is utilized by many species of vertebrates, including birds, amphibians, and mammals. Sensitive species, such as the least Bell's vireo and southwestern willow flycatcher, have the potential to occur within this site.

The beach parcel located south of the Newport Aquatics Center (NAC) consists of dredged sand material and supports predominately ruderal plant species including cheeseweed (*Malva pariflora*), red-stemmed filaree (*Erodium cicutarium*), sea rocket, and black mustard (*Brassica nigra*). The bluff located to the west of the beach and the NAC facilities, and east of the adjacent residential area supports several non-native ornamental trees and shrubs including acacia, myoporum, and pine. Several saltbush shrubs are located throughout the sandy beach and bluff areas within this parcel. A small wetland supported by nuisance water runoff (from the western bluffs and residential area) is located just north of the NAC facilities. This area mainly supports willow (*Salix* spp.), palm (*Phoenix* sp.), and sedge.

North of where the wetland reaches the bay, native saltwater marsh and southern coastal bluff scrub habitat is found that lacks the exotic species present in the southern portion of the study area.

Potential impacts to the natural habitats in this study area include erosion, increased human activity, ambient noise, invasive species, and uncontrolled public access.

Study Area No. 3: West Bay



Non-native grasslands and Diegan coastal sage scrub habitat at Upper Newport Bay Nature Preserve

The 84.4-acre West Bay ESA is located along Irvine Avenue from University Drive south along the east side of Galaxy Drive. It is bordered by the Upper Newport Bay Marine Park to the east, residential development to the north and west, and the North Star Beach ESA to the south.

This parcel consists of four characteristic plant communities, including Diegan coastal sage scrub, southern coastal bluff scrub, disturbed southern willow scrub, and non-native

grassland. Much of the non-native grassland was most likely remnant coastal sage scrub habitat prior to being cleared. The Dieagan coastal sage scrub habitat is located primarily near the bay, with a few stands that border Irvine Avenue, and is primarily composed of California sagebrush, coyote brush, prickly pear (*Opuntia* sp.), coast goldenbush (*Isocoma menziesii* var. *menziesii*), and lemonadeberry.

The southern section of the study area overlooking the bay supports southern coastal bluff scrub vegetation. Plant species associated with this area include saltbush, tree lupine (*Lupines arborous*), prickly pear, coyote brush, California buckwheat, coastal goldenbush, and California bush sunflower. This area is contiguous with the bluff habitat along North Star Beach.

A small drainage located near 23rd Street (the remnant of Indian Springs) transports nuisance water runoff from the residential area located west of Irvine Avenue, and crosses the southern portion of the West Bay ESA before reaching the bay. This drainage supports a disturbed southern willow scrub plant community dominated by willow, eucalyptus, and giant reed. Several coastal sage scrub restoration areas, revegetated with young native shrubs, are located along the gradual slopes located north of the drainage. Black mustard and wild oats dominate the non-native grassland plant community, which is found throughout the parcel and most often bordering Irvine Avenue.

This site is used as open space as well as for recreational opportunities and includes the Muth Interpretive Center operated by the County of Orange. A paved bike and pedestrian trail is located along the crest of the West Bay parcel. Several dirt trails transect the north end of the parcel.

Potential impacts to the natural habitats in this study area include erosion, increased human activity, ambient noise, invasive species, and uncontrolled public access.

Study Area No. 4: Upper Newport Bay Marine Park/DeAnza Bayside Marsh Peninsula

The Upper Newport Bay Marine Park is located within the upper two-thirds of Upper Newport Bay. The site is bordered by Irvine Boulevard and residential areas to north and west, the lower reach of Upper Newport Bay to the south, and San Diego Creek to the The 787.6-acre Upper Newport Marine Park extends Bav from Shellmaker Island to the Jamboree Road Bridge. The DeAnza Bayside Marsh Peninsula is located outside of the Maine Park boundaries at the southern-most section of Upper



Southern coastal salt marsh habitat at Upper Newport Bay

Newport Bay, immediately north of the Coast Highway Bridge. It consists of high quality salt marsh, intertidal mudflats, and subtidal habitats, including eelgrass (*Zostera marina*).

Upper Newport Bay, one of the largest coastal wetlands remaining in southern California, is an ecological resource of national significance. Sensitive natural habitats within Upper Newport Bay include estuarine marine open water, coastal freshwater marsh, intertidal mudflat, salt panne, Diegan coastal sage scrub, and southern coastal salt marsh. Salt marsh habitat within Upper Newport Bay includes cordgrass-dominated low salt marsh, pickleweed-dominated mid salt marsh, and high salt marsh.

This ESA supports several listed bird species and an endangered plant. The resident population of the state and federal endangered light-footed clapper rail (*Rallus longirostris levipes*) in Upper Newport Bay represents about 65 percent of the California population of this species. Upper Newport Bay has consistently supported the highest numbers of rails of any southern California wetland, and is believed to be the only viable subpopulation remaining in the United States. The highest number of breeding clapper rails during the 1990s in Upper Newport Bay was 158 pairs in 1996. The 1999 census recorded 104 pairs. Low salt marsh dominated by cordgrass is the species' preferred nesting habitat, but it has been known to breed in brackish and even freshwater marsh. Clapper rails are found throughout the Upper Bay, heavily utilizing cordgrass marsh for nesting at several

locations, including Shellmaker Island, Middle Island, Upper Island, and salt marsh habitat above the Main Dike.



De Anza/Bayside Marsh Peninsula

The state endangered Belding's savannah sparrow is a year-round resident and breeder in Upper Newport Bay. Its preferred nesting habitat is pickleweed-dominated mid salt marsh. In 1996, the population in Upper Newport bay was 252 pairs.

The state and federal endangered California least tern is a seasonal resident in Upper Newport Bay from April to early September. They nest on Least Tern Island, the smaller of two islands in the uppermost sedimentation basin. In

1999, 40 pairs of least terns nested on this island. In 2000, 60 least tern pairs nested in Upper Newport Bay and fledged 12 young. Skimmers and Forsters terns nest on the second, and larger island (Skimmer Island) in the uppermost sedimentation basin.

The federally threatened coastal California gnatcatcher nests in coastal sage scrub along the margins of Upper Newport Bay. There are at least 10 pairs breeding in upland habitat surrounding Upper Newport Bay.

Other listed bird species that occur in Upper Newport Bay on a seasonal basis but do not breed there include the state and federal endangered California brown pelican, the federal threatened western snowy plover, and the state endangered American peregrine falcon.

The state and federal endangered plant salt marsh bird's beak occurs at several sites in high salt marsh habitat in Upper Newport Bay. It is the only listed plant species confirmed to occur in the Upper Newport Bay Marine Park.

In addition to these listed species, a number of bird species that are Federal Species of Concern and/or State Species of Special Concern use the Upper Newport Bay Marine Park. The California brackish water snail, a Federal Species of Concern, is common around freshwater discharges to the Upper Bay.

Because of its diversity of habitats and its location on the Pacific Flyway, Upper Newport Bay supports an impressive number and diversity of birds, particularly during fall and winter when shorebirds and waterfowl arrive from their northern breeding grounds. There are approximately 182 bird species that regularly occur in Newport Bay over a calendar year. Only about 18 percent of these are year

round residents. The large number of non-resident bird species indicates Newport Bay's value not only to the local resident bird community, but also to a large number of migratory gulls, terns, raptors, shorebirds and waterfowl that are key species in ecosystems in other areas of the continent.

At least 78 fish species have been identified in various studies of Upper Newport Bay. Newport Bay is an important habitat for resident estuarine species, as well as a spawning and nursery ground for a variety of marine species including California halibut (Paralichthys californicus), yellowfin croaker, white seabass (Atractoscion nobilis) and barred sandbass.

The ecological diversity and functionality of the Upper Newport Bay Marine Park has been threatened by sedimentation from the surrounding watershed. The primary source of freshwater and sediment loads to Upper Newport Bay is San Diego Creek. Sediment from the San Diego Creek watershed has filled open water areas within the Bay. This sedimentation has decreased the extent of tidal inundation, diminished water quality, degraded habitat for endangered species, migratory water birds, and marine and estuarine fishes. Heavy sedimentation during the 1998 El Nino required dredging in 1998 and 1999. Recently, a longterm management plan was developed to control sediment deposition in the Upper Bay to preserve the health of Upper Newport Bay's habitats. That plan identified basin configurations and depths to control sedimentation in the Upper Bay.

The slopes of the bluffs along Upper Newport Bay are unstable and have required stabilization devices and bluff repairs. Irrigation practices on the tops of the bluffs have contributed to both erosion and eutrophication problems in the Upper Bay.

Study Area No. 5: San Diego Creek

The 37.3-acre San Diego Creek ESA is bordered by Jamboree Road to the west, Bayview Way and a commercial automobile dealership to the north, MacArthur Boulevard to the east, and the residential area adjacent University Drive on the south. The San Diego Creek site is contiguous with the Upper Newport Bay Marine Park, and merges with the bay in the vicinity of Jamboree Road. This study area includes two main parcels: the main channel of San Diego Creek and an adjacent Main channel of San Diego Creek saltwater marsh mitigation area



located to the north.

The San Diego Creek study area is dominated by southern willow scrub and southern coastal salt marsh communities. These habitats are considered sensitive, and are listed as rare or threatened or are otherwise protected by the USFWS, CDFG, or local agencies. Southern willow scrub is utilized by many species of vertebrates including birds, amphibians, and mammals. Sensitive species, such as the least Bell's vireo and southwestern willow flycatcher, have the potential to occur within this site. Southern coastal salt marsh also provides habitat for many sensitive plants and animals, which have the potential to occur within this site. The California brackish water snail, a Federal Species of Concern, is common around freshwater discharges to the Upper Bay, including San Diego Creek.

The marsh site is separated from the main channel by an earthen levee, but is hydraulically recharged by San Diego Creek during high water events through an existing culvert. The marsh site consists of two primary habitat types: southern coastal salt marsh (aquatic) and southern willow scrub. The middle of the site is inundated with low-to-moderate amounts of water, and is dominated by salt marsh and emergent wetland vegetation including pickleweed, salt grass, and bulrush (*Scirpus* sp.). Portions of this area have been revegetated with native plants. The eastern portion of the site gives rise to southern willow scrub and primarily consists of willow (*Salix* sp.), mule fat, and cattails. The upland areas of this site support a mixture of habitat types and consist of shrub species, including California bush sunflower, saltbush, and mule fat.

The main channel is characterized by southern willow scrub. This area is dominated by willow and mule fat, and supports a few isolated cottonwood trees (*Populus* sp.). Two exotic species, giant reed and brass buttons, are commonly found throughout the riparian zone.

Potential impacts to the natural habitats in this study area included human activity, ambient noise, invasive species, and uncontrolled public access.

Study Area No. 6: Eastbluff Remnant



Southern coastal bluff scrub at Eastbluff Remnant

The 36.5-acre Eastbluff Remnant ESA extends along the eastern side of Back Bay Drive from Jamboree Road to Eastbluff Drive, and is bordered by Upper Newport Bay to the north and west, residential development to the east, and San Joaquin Hills Road to the south.

This study area consists of three main plant communities, including southern coastal bluff scrub, Diegan coastal sage scrub, and southern willow scrub.

Most of the study area consists of steeply sloped west-facing bluffs. The areas support mainly southern coastal bluff scrub vegetation with some evidence of Dieagan coastal sage scrub species. Plant species associated with this area include saltbush, tree lupine, coastal goldenbush, California bush sunflower, coyote brush, California buckwheat, prickly pear, cholla (*Opuntia* sp.), California sagebrush, and lemonadeberry.

There are varying degrees of previous disturbance, mostly resulting from the adjacent residential area to the east. Several non-native species are found throughout these areas, including sea fig, tree tobacco, sweet fennel (*Foeniculum vulgare*), black mustard, and castor bean.

The Dieagan coastal sage scrub habitat dominates the upper, less steep portions of the parcel, and is primarily composed of California sagebrush, coyote brush, prickly pear, and Mexican elderberry, poison oak, and lemonadeberry.

Southern willow scrub vegetation may be found within several tributaries to Newport Bay and along the eastern edge of Back Bay Road, where water accumulates before entering the bay. These areas are dominated by willow and mule fat. Dense stands of Mexican elderberry, willow, and poison oak dominate the north-facing slopes in the northeastern portion of the East Bluff parcel.

Potential impacts to the natural habitats in this study area include erosion, increased human activity, ambient noise, invasive species, and uncontrolled public access.

Study Area No. 7: Mouth of Big Canyon

The 52.0-acre Big Canyon ESA is located on the east side of Newport Bay, between Back Bay Drive and Jamboree Road. The Mouth of Big Canyon site is bordered by Upper Newport Bay to the west and residential development to the east, north, and south of the site.

Many trails throughout this area provide good access for the public to observe the variety of habitats and plant communities. The backbone routes for these trails are utility



Fresh water marsh at the mouth of Big Canyon

access roads needed to provide access for maintenance vehicles that service the utilities that have been installed in this site. This site provides an opportunity to establish an interpretive area that allows public access to a broad range of habitats and plant community areas that should be reestablished as a destination for the public.

Seven plant communities characterize this site, including southern willow scrub, Diegan coastal sage scrub, non-native grassland, southern coastal bluff scrub, southern coastal salt marsh, southern cottonwood willow riparian forest, and coastal freshwater marsh.

Big Canyon is oriented perpendicular to the bay. The upper (eastern) portion of the creek supports native plants characteristic of southern willow scrub communities dominated by densely growing willows and mule fat. The upland areas within the eastern region contain a mixture of disturbed Diegan coastal sage scrub and non-native grassland. Plant species found in this area include coyote brush, lemonadeberry, black mustard, and sweet fennel. The canyon is outlined by intermittent stands of ornamental trees and shrubs including eucalyptus and acacia, which are located next to the adjacent residential zones.

The mouth of the canyon widens towards the bay and supports a mixture of southern coastal bluff scrub and Diegan coastal sage scrub along both the north and south-facing slopes. These areas are dominated by California sagebrush, California buckwheat, prickly pear, saltbush, lemonadeberry, and Mexican elderberry.

The western reach of the canyon creek forms a pond, while supporting a mature southern cottonwood willow riparian forest and coastal freshwater marsh. Fremont cottonwood (*Populus fremontii* spp. *fremontii*), western sycamore, and willow

dominate the overstory of the riparian forest. Stinging nettle (*Urtica diocia*) can be found amongst the herbaceous layer. The northern margins of the riparian forest show evidence of dryer climates and supports revegetated species such as holly-leaf redberry and jojoba (*Simmondsia chinensis*). The coastal freshwater marsh is surrounded by cattail and sedge.

Remnants of the southern coastal salt marsh habitat are evident on the dredge sand deposits located immediately south of the freshwater marsh, where pickleweed is the dominant plant species.

Potential impacts to the natural habitats in this study area include erosion, creek water quality runoff, sedimentation, erosion, increased human activity, ambient noise, invasive species, and uncontrolled public access.

Study Area No. 8: Newporter North



Diegan coastal scrub on the slopes of Newporter North

The Newport North is located in bluff and mesa habitats along Back Bay Drive and San Joaquin Hills Road adjacent to Upper Newport Bay. The 49.2-acre Newporter North ESA is bordered by Upper Newport Bay to the west, the Hyatt Newporter Hotel to the south, Jamboree Road to the east, and residential development to the east and north of the site.

The Newporter North ESA is characterized by five plant communities, including southern

willow scrub (disturbed), coastal freshwater marsh, Diegan coastal sage scrub, southern coastal bluff scrub, and non-native grassland.

A drainage (John Wayne Gulch) runs east to west from Jamboree Road to the bay. The upper (eastern) portion of the drainage supports native plant species that are characteristic of southern willow scrub communities including willows, mule fat, and Mexican elderberry. This drainage also supports many exotic species including myoporum, tree tobacco, eucalyptus, pampas grass (*Cortaderia selloana*), and sweet fennel. The lower (western) portion of the drainage widens into a coastal freshwater marsh before reaching the bay. This area is thickly vegetated and dominated by cattail, sedge, and brass buttons. Additionally, there is a wetland restoration area located in the far northeast portion of this parcel, which is dominated by willows, mule fat, and cattails.

Diegan coastal sage scrub occurs at higher elevations within the parcel along the south and north-facing slopes. Plant species associated within this area include California sagebrush, coyote brush, California bush sunflower, California buckwheat, Mexican elderberry, coastal goldenbush, and deerweed. An area located just south of San Joaquin Hills Road supports densely growing coastal sage scrub vegetation. A small square parcel of coastal sage scrub bordered by Newporter Way and Jamboree Road is found within this section of the study area.

The steeper west-facing slopes, located above Back Bay Drive to the north and south of the main canyon, support southern coastal bluff scrub vegetation. Plant species associated with this area include saltbush, tree lupine, prickly pear, coyote brush, California buckwheat, coastal goldenbush, and California bush sunflower.

Historically, most of the upland areas located in the southwestern portion of the parcel most likely supported coastal sage scrub communities; however land modification and clearing has disturbed these areas, leaving many sections supporting only non-native grasslands. Common species found within the non-native grassland community include black mustard, white sweetclover (*Melilotus alba*), artichoke thistle (*Cynara cardunculus*), and pampas grass.

Potential impacts to the natural habitats in this study area include erosion, increased human activity, ambient noise, invasive species, and uncontrolled public access.

Study Area No. 9: Buck Gully

Buck Gully is a natural feature extending between Little Corona Beach and the San Joaquin Hills. The 74.2-acre Buck Gully ESA does not include the sections of the canyon that are located outside of the coastal zone or within Newport Coast. The ESA is bordered by the Pacific Ocean to the southwest, and residential and commercial development to the southeast, northwest, and north of the site. Pacific Coast Highway bisects the canyon. Drainage from Buck Gully empties on to Little Corona Beach.



Buck Gully southwest from Coast Highway

The portion of Buck Gully between the extension of Fifth Avenue and Little Corona is under private ownership.

The Buck Gully ESA is dominated by Diegan coastal sage scrub and southern mixed chaparral, with southern willow scrub, annual grassland, and coastal freshwater marsh occurring as smaller components of the community. Diegan coastal sage scrub and southern mixed chaparral encompass the majority of the gully - from the upper rims to the alluvial bottoms. A narrow ribbon of southern willow scrub riparian habitat is supported by an unnamed creek that flows along the canyon bottom the length of the gully. Patches of annual grassland occur throughout the chaparral and coastal sage scrub habitats and also in areas where native vegetation has been cleared for fire prevention. The narrow, western reach of the canyon is largely encroached upon by the adjacent residential areas to the southeast and northwest. The upper slopes in this area of the canyon support a mix of disturbed southern mixed chaparral, a small patch of coastal sage scrub, and non-native ornamental vegetation originating from the surrounding homes. Typical chaparral species in this area include toyon (*Heteromeles arbutifolia*), laurel sumac (Malosma laurina), and ceanothus (Ceanothus sp.) Non-native and ornamental species include giant reed (Arundo donax), acacia, eucalyptus, myoporum, Mexican fan palm, Brazilian pepper tree (Schinus terebinthifolius), Peruvian pepper tree (Schinus molle), castor bean (Ricinus communis), tree tobacco (Nicotiana glauca), pampas grass (Cortaderia sp.), and fennel (Foeniculum vulgare). The canyon bottom in this area is dominated by riparian vegetation including willows (Salix spp.), blackberry (Rubus sp.), cattail (Typha sp.), and bulrush (Scirpus sp.). A small freshwater marsh comprised almost exclusively of cattail is situated at the mouth of the gully adjoining Little Corona Beach.

The central section of the canyon immediately northeast of the Coast Highway, while closely confined by residential development, contains fewer ornamental plant species than the coastal portion and supports southern mixed chaparral and southern willow scrub habitats with species compositions similar to the lower canyon. The chaparral in this area supports toyon, laurel sumac, ceanothus, chamise (*Adenostoma fasciculatum*), lemonadeberry (*Rhus integrifolia*), scrub oak (*Quercus berberidifolia*), southern honeysuckle (*Lonicera subspicata*), redberry (*Rhamnus crocea*), bush monkey flower (*Mimulus aurantiacus*), and sugar bush (*Rhus ovata*).

Approximately adjacent to the intersection of 5th Avenue and Poppy Avenue, the gully veers east and opens into a broader canyon. The southern slopes of the canyon in this area support dense stands of southern mixed chaparral, while the northern slopes support disturbed annual grassland, possibly established as chaparral and coastal sage scrub, but subsequently cleared for fire prevention by homeowners. At present, the annual grassland contains black mustard (*Brassica nigra*), tocalote (*Centaurea melitensis*), artichoke thistle (*Cynara cardunculus*), wild oats (*Avena fatua*), soft chess (*Bromus hordeaceus*), barley (*Horedum* sp.), ripgut brome (*Bromus diandrus*), and fennel. Diegan coastal sage scrub becomes more

dominant as the canyon slopes on the upper portions of the canyon veer eastward. This community is composed of California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), white sage (*Salvia apiana*), prickly pear (*Optunia* sp.), coyote brush (*Baccharis pilularis*), blue elderberry (*Sambucus mexicana*), laurel sumac, lemonadeberry, and California bush sunflower (*Encelia californica*).

The canyon floor of Buck Gully supports a southern willow scrub community, dominated by willows and mule fat (*Baccharis salicifolia*), with occasional western sycamore (*Platanus racemosa*) and cottonwood (*Populus fremontii*). Associated plant species include cattail, blue elderberry, poison oak (*Toxicodendron diversilobum*), rush (*Juncus* spp.), and nutsedge (*Cyperus* sp.).

The upper canyon is broader than the lower canyon and is therefore less impacted by adjacent development. Vegetation in this area is primarily Diegan coastal sage scrub and southern mixed chaparral, interrupted by occasional patches of annual grassland, and southern willow scrub associated with the creek at the canyon bottom.

The lower (western) portion of Buck Gully is isolated from the upper Buck Gully by the Coast Highway. This area is closely confined by residential development on the south and north. The proximity to development, accessibility by local residents and their pets, and abundance of non-native ornamental plant species detract from the quality of habitat for wildlife species in this area. The upper (eastern) portion of Buck Gully is a broad, open, relatively undisturbed canyon. Coastal sage scrub and mixed chaparral dominate much of the area, except for the riparian corridor along the canyon bottom and the tops of the canyon, which are influenced by the adjacent residential development. Much of the native vegetation near the rim of the canyon has been removed to reduce wildfire hazard.

Ornamental and non-native plant species from the adjacent residential development have encroached into Buck Gully, especially in the lower, narrow portions. Annual grasslands in Buck Gully consist of nonnative annual grasses and forbs. Some non-native inclusions were also observed in the Diegan coastal sage scrub, southern mixed chaparral, and southern willow scrub habitats.

Potential impacts to the natural habitats in this study area include erosion, contaminated urban runoff, increased human activity, ambient noise, invasive species, and uncontrolled public access.

Study Area No. 10: Morning Canyon

Morning Canyon is oriented perpendicular to the coastline between Corona Highlands and Cameo Highlands. The 11.2-acre study area is bordered by the

Pacific Ocean to the west, Pelican Hills Golf Course to the east, and residential development to the north and south of the site. Morning Canyon is under private ownership.



Morning Canyon near Pelican Bay Golf Course

Morning Canyon is characterized by disturbed, remnant, southern mixed chaparral vegetation on the canyon floor and along the upland slopes. This area, however, contains few remaining native species and is dominated by non-native and ornamental species that have invaded the canyon from adjacent residential areas located immediately to the northwest and southeast. Native plant species in the remnant southern mixed chaparral community include coyote brush, toyon, mountain

mahogany (*Cercopcarpus betuloides*), lemonadeberry, and blue elderberry. Non-native species include fennel, pampas grass, acacia, date palm (*Phoenix* sp.), fig (*Ficus* sp.), hottentot fig (*Carpobrotus edulis*), Himalayan blackberry (*Rubus discolor*), tree tobacco, pittosporum (*Pittosporum* sp.), and castor bean.

The canyon bottom once supported a southern willow scrub and willows, mule fat, and mugwort (*Artemisia douglasiana*) can still be observed growing among the dominant non-native vegetation, though these species are no longer common enough to consider this habitat to be southern willow scrub. Nonnative plant species now dominate the bottom and lower slopes of the canyon and include giant reed, acacia, hottentot fig, eucalyptus, myoporum, Mexican fan palm, Brazilian pepper tree, Peruvian pepper tree, pampas grass, ivy (*Hedera* sp.), and fennel.

Although most of the native riparian-associated species have been displaced by non-native and ornamental species, the area is still used by riparian wildlife, such as American crow (*Corvus brachyrhyncus*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), cedar waxwing (*Bombycilla garrulous*), English sparrow (*Passer domesticus*), raccoon (*Procyon lotor*), and opossum (*Didelphis virginiana*). The presence of a perennial watercourse along with a structurally diverse woody vegetation community provides the necessary habitat attributes that are essential to riparian-associated species.

The lower, southwestern section of Morning Canyon is separated from the upper section of Morning Canyon by the Coast Highway. The entire canyon is very narrow and closely bordered by residential development on the northwest and southeast, the Pacific Ocean to the southwest, and the Pelican Hills Golf Course at the northeastern edge of the area. Ornamental species have completely displaced native vegetation in much of canyon and now dominate throughout the majority of this ESA. Pets from the adjacent residences likely use the area and further discourage wildlife use of the canyon.

Potential impacts to the natural habitats in this study area include increased human activity, ambient noise, invasive species, erosion, sedimentation, and uncontrolled public access.

Study Area No. 11: Newport Beach Marine Conservation Area

The 85.8-acre Newport Beach Marine Conservation Area extends from Little Corona Beach to Cameo Shores Road. The refuge's coastline length is 0.6 miles (mi). It extends a distance of 200 feet (ft) offshore and to depths of about 18 ft Mean Lower Low Water (MLLW). This refuge is significant because it is the first section of rocky intertidal and rocky subtidal habitat south of Point Fermin, along with the Irvine Coast Marine Conservation Area. While sections of the refuge are within high visitor use areas (Little Corona Tide



Arch Rock in the Newport Beach Marine Conservation Area

Pools) and have exhibited declines in biodiversity related to public use as well as natural processes, the downcoast section of the refuge in the vicinity of Cameo Shores is relatively inaccessible and exhibits less human-use disturbances. The beach is fronted by a sandstone bluff mixed with native coastal scrub and introduced vegetation. Intertidal areas consist of platform intertidal reefs and pocket sandy beaches, with conspicuous offshore rocks, stacks, and arches. Subtidally, the seafloor is a mixture of sand bottom and reefs. The siltstone reefs extend seaward of the limits of the refuge to depths of about 50 ft. Numerous types of plants, invertebrates, fishes, and seabirds occur within the limits of the refuge, and marine mammals (sea lions, bottlenose dolphin, and gray whales) will occasionally pass through. Tide pools use at Little Corona is managed by the City's tide pool ranger program, which includes docent-led tours of more than 3,000 students annually.

Runoff from the surrounding watershed and streets enter the refuge at several points, the largest being Buck Gully, which drains across the sandy beach into the refuge. This runoff consists of various pollutants, such as fecal material from pets,

oil and grease, fertilizers, and other urban-based pollutants. In addition, Buck Gully runoff contributes to high-suspended sediment loads to the refuge, particularly during years of high rainfall and runoff, which increases water turbidity and reduces submarine light levels. Water quality in the refuge is also likely influenced by the quality of the tidal waters flushed from Newport Bay on the outgoing tides, which tend to move downcoast oriented longshore currents.

Heavy human use of the refuge has a major impact on the refuge's intertidal marine resources, resulting from illegal collecting and trampling of intertidal plants and invertebrates. Party boats and commercial and sport fishing vessels, as well as skin divers and scuba divers frequent the waters of the refuge for fishing and collecting. Commercial lobster fishermen also utilize the nearshore reefs within the refuge. These activities have a potential to reduce the productivity of the nearshore fishery.

The Irvine Coast Marine Conservation Area will expand to include the Newport Beach Marine Conservation Area and parts of the Laguna Beach Marine Conservation Area, and will be named the Crystal Cove State Marine Reserve under the Marine Life Protection Act (MLPA). The goal of the MLPA (Chapter 1015, Statutes of 1999) is to set up a system for evaluating and coordinating Marine Protected Areas (MPAs) in the state. The MLPA states that "marine life reserves" are essential elements of an MPA system because they "protect habitat and ecosystems, conserve biological diversity, provide a sanctuary for fish and other sea life, enhance recreational and educational opportunities, provide a reference point against which scientists can measure changes elsewhere in the marine environment, and may help rebuild depleted fisheries." The CDFG is required to develop a comprehensive master plan that combines ecosystem management with protection and public outreach for the state's MPAs, including the Newport Beach Marine Conservation Area. Under state marine reserve status. commercial and recreational fishing could be further restricted or prohibited to protect marine resources.

Study Area No. 12: Castaways

The 23.3-acre Castaways ESA is located east of Dover Drive and south of Castaways Lane along Upper Newport Bay. A church and offices are located to the north, residential developments are located immediately west and Lower Castaways is located between the study area and the Coast Highway Bridge. Several trails cross throughout the site and can be accessed via Castaways Lane. The Castaways site is designated as a view park. The existing trail system encourages and directs the public to locations where the views of the coast, harbor and bay can be enjoyed with minimal impacts to the natural habitats.



Coastal bluff scrub at Castaways

The Castaways site is characterized by four plant communities: southern willow scrub, Diegan coastal sage scrub (a restoration area), southern coastal bluff scrub, and non-native grassland.

The center of the site is characterized by non-native grassland, which comprises the majority of the site. Plant species associated with this community include black mustard, Russian thistle, and Bermuda grass (*Cynodon dactylon*). Several dirt trails and paved routes transect the parcel.

A drainage runs north-to-south from the church parking lot parallel to Dover Drive. This drainage is dominated by native plant species that are characteristic of southern willow scrub communities including willows, mule fat, western sycamore, cattail, and Mexican elderberry. A second ephemeral drainage runs east-to-west from the hilltop near Dover Drive. This feature supports mainly upland and non-native vegetation including Brazilian pepper tree, Peruvian pepper tree, acacia, eucalyptus, myoporum, tree tobacco, and lemonadeberry.

The eastern portion of the site located along the east-facing slopes that overlook the bay support southern coastal bluff scrub vegetation. Saltbush, tree lupine, prickly pear, coyote brush, California buckwheat, and coastal goldenbush, and California bush sunflower dominate the vegetative cover. The bluff area is fenced and protected from direct disturbance. Bluff habitat within this study area is continuous with the bluff habitat that stretches north to Polaris Drive.

A Diegan coastal sage scrub restoration area is located within the northwest portion of the parcel, immediately east of the riparian area. Plant species associated with this area include California sagebrush, coyote brush, California buckwheat, black sage (*Salvia mellifera*), and coastal goldenbush.

The Diegan coastal sage scrub restoration area is the first phase of Castaways Park Revegetation Project. The project will remove the non-native and ruderal vegetation and replace it with new native vegetation to create a view park for passive recreation and nature observation.

Potential impacts to the natural habitats in this study area include increased human activity, ambient noise, invasive species, and uncontrolled public access.

Study Area No.13: Newport Harbor Entrance Channel Kelp Beds



Giant kelp bed habitat at Newport Harbor Entrance

The kelp (Macrocvstis giant pyrifera) bed within the Newport Harbor Entrance Channel is one of the only giant kelp bed habitats currently existing between Seal Beach and South Orange County. Giant kelp beds, once found abundantly along the coastline between Corona del Mar and Laguna Beach are now extremely sparse. Warming trends, El Nino storm events. ecological imbalances due to over fishing, and

extensive grading of lands around

drainages adjacent to kelp beds that increase suspended sediment loads to the ocean are important contributors to the decline of kelp beds in southern California and have likely resulted in the decline of kelp beds within the Newport Beach Marine Conservation Area and the Irvine Coast Marine Conservation Area/Crystal Cove State Park. Giant kelp currently is rare within these refuges. Giant kelp reforestation is being attempted in Crystal Cove State Underwater Park. However, it is still too early to evaluate the success of this project.

Occurring along nearly half of the length of the west jetty and extending from depths of 10 to 30 feet, the Newport Harbor Entrance giant kelp bed, while relatively small, has maintained itself over a period of several years while other kelp beds along the Newport Beach and Laguna Beach have declined. separate kelp beds are present. The largest bed is located along the outermost half of the west jetty, while a second and smaller bed is located along inner third of the west jetty. The total acreage of kelp is approximately 1.16 acres. It is a productive and viable resource and supports over 70 species of plants, invertebrates, and fishes. During subtidal reconnaissance dives of underwater habitats along the Newport coastline in 2002, the marine life associated with the Newport Harbor Entrance Channel jetty quarry rock and within the kelp bed was second only to the 200 Meter Reef, located in the Crystal Cove Underwater Park, in species richness.

Dredging activity and jetty reconstruction projects have a potential to reduce the viability of the kelp beds located within the Harbor Entrance Channel. Future projects conducted within the Entrance Channel should include protection measures to avoid long-term impacts to kelp bed resources.

TABLE 4.1-1												
Environmental Study Area Impacts and Mitigation Measures												
Study Area No.	Name	Water Quality ¹	Traffic	Noise	Public Access	Development Encroachment	Erosion, Sedimentation	Dredging or Filling	Stormwater Runoff	Invasive Species	Feral Animals	Mitigations to Reduce the Potential Impacts of Identified Threats
1	Semeniuk Slough	х				х				х		POLICY 4.1.3-1 (A) POLICY 4.1.3-1 (B) POLICY 4.1.3-1 (D) POLICY 4.1.3-1 (E) POLICY 4.1.3-1 (N)
2	North Star Beach	х		х	х	х	х	Х	х	х	х	POLICY 4.1.3-1 (B) POLICY 4.1.3-1 (C) POLICY 4.1.3-1 (D) POLICY 4.1.3-1 (E) POLICY 4.1.3-1 (F) POLICY 4.1.3-1 (G) POLICY 4.1.3-1 (N)
3	West Bay	х		х	х	х	х	Х	х	х	х	POLICY 4.1.3-1 (B) POLICY 4.1.3-1 (C) POLICY 4.1.3-1 (D) POLICY 4.1.3-1 (E) POLICY 4.1.3-1 (F) POLICY 4.1.3-1 (G) POLICY 4.1.3-1 (N)
4	UNBMP and De Anza Bayside Marsh Peninsula	х		х	х	х	х	Х	х	х	Х	POLICY 4.1.3-1 (B) POLICY 4.1.3-1 (C) POLICY 4.1.3-1 (D) POLICY 4.1.3-1 (E) POLICY 4.1.3-1 (F) POLICY 4.1.3-1 (G) POLICY 4.1.3-1 (H) POLICY 4.1.3-1 (I) POLICY 4.1.3-1 (N)



TABLE 4.1-1 Environmental Study Area Impacts and Mitigation Measures												
Study Area No.	Name	Water Quality ¹	Traffic	Noise	Public Access	Development Encroachment	Erosion, Sedimentation	Dredging or Filling	Stormwater Runoff	Invasive Species	Feral Animals	Mitigations to Reduce the Potential Impacts of Identified Threats
5	San Diego Creek	х		х	х	Х	х	Х	х	x	Х	POLICY 4.1.3-1 (B) POLICY 4.1.3-1 (C) POLICY 4.1.3-1 (D) POLICY 4.1.3-1 (E) POLICY 4.1.3-1 (N)
6	East Bluff Remnant	х		х	х	х	х	X	х	х	Х	POLICY 4.1.3-1 (B) POLICY 4.1.3-1 (C) POLICY 4.1.3-1 (D) POLICY 4.1.3-1 (E) POLICY 4.1.3-1 (F) POLICY 4.1.3-1 (G) POLICY 4.1.3-1 (N)
7	Mouth of Big Canyon	Х		х	х	х	х	Х	х	х	Х	POLICY 4.1.3-1 (B) POLICY 4.1.3-1 (C) POLICY 4.1.3-1 (D) POLICY 4.1.3-1 (E) POLICY 4.1.3-1 (F) POLICY 4.1.3-1 (G) POLICY 4.1.3-1 (N)
8	Newporter North	Х		х	х	х	х	Х	х	Х	Х	POLICY 4.1.3-1 (B) POLICY 4.1.3-1 (C) POLICY 4.1.3-1 (D) POLICY 4.1.3-1 (E) POLICY 4.1.3-1 (F) POLICY 4.1.3-1 (G) POLICY 4.1.3-1 (N)
9	Buck Gully	Х		х	х	х	х	Х	х	х	х	POLICY 4.1.3-1 (B) POLICY 4.1.3-1 (C) POLICY 4.1.3-1 (D) POLICY 4.1.3-1 (E) POLICY 4.1.3-1 (F) POLICY 4.1.3-1 (G) POLICY 4.1.3-1 (N)
10	Morning Canyon	Х		Х	Х	х	х	Х	х	Х	Х	POLICY 4.1.3-1 (B) POLICY 4.1.3-1 (C) POLICY 4.1.3-1 (D) POLICY 4.1.3-1 (E) POLICY 4.1.3-1 (N)

TABLE 4.1-1 Environmental Study Area Impacts and Mitigation Measures												
Study Area No.	Name	Water Quality ¹	Traffic	Noise	Public Access	Development Encroachment	Erosion, Sedimentation	Dredging or Filling	Stormwater Runoff	Invasive Species	Feral Animals	Mitigations to Reduce the Potential Impacts of Identified Threats
11	Newport Beach Marine Conservati on Area	х			х		X	Х	х	Х	х	POLICY 4.1.3-1 (B) POLICY 4.1.3-1 (J) POLICY 4.1.3-1 (K) POLICY 4.1.3-1 (L) POLICY 4.1.3-1 (M) POLICY 4.1.3-1 (N)
12	Castaways	х		х	х	х	х	X	х	х	х	POLICY 4.1.3-1 (B) POLICY 4.1.3-1 (C) POLICY 4.1.3-1 (D) POLICY 4.1.3-1 (E) POLICY 4.1.3-1 (F) POLICY 4.1.3-1 (G) POLICY 4.1.3-1 (N)
13	Newport Harbor Entrance Channel	Х					х	х	х	Х	Х	POLICY 4.1.3-1 (N) POLICY 4.1.3-1 (O) POLICY 4.1.3-1 (P) POLICY 4.1.3-1 (Q)

Water quality issues include one or more types of subcategories suspended sediments nutrient enrichment BOD/COD Metals and petroleum hydrocarbons Coliform bacteria, viruses, pathogens



Upper Newport Bay Marine Park

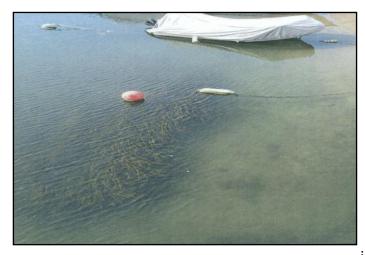
- **4.1.3-1.** Utilize the following mitigation measures to reduce the potential for adverse impacts to ESA natural habitats from sources including, but not limited to, those identified in Table 4.1.1:
 - A. Require removal of unauthorized bulkheads, docks and patios or other structures that impact wetlands or other sensitive habitat areas.
 - B. Where pedestrian access is permitted, avoid adverse impacts to sensitive areas from pedestrian traffic through the use of welldefined footpaths, boardwalks, protective fencing, signage, and similar methods.
 - C. Prohibit the planting of non-native plant species and require the removal of non-natives in conjunction with landscaping or revegetation projects in natural habitat areas.
 - D. Strictly control encroachments into natural habitats to prevent impacts that would significantly degrade the habitat.
 - E. Limit encroachments into wetlands to development that is consistent with Section 30233 of the Coastal Act and Policy 4.2.3-1 of the Coastal Land Use Plan.
 - F. Regulate landscaping or revegetation of blufftop areas to control erosion and invasive plant species and provide a transition area between developed areas and natural habitats.
 - G. Require irrigation practices on blufftops that minimize erosion of bluffs.
 - H. Participate in implementation of Total Maximum Daily Loads (TMDLs) see Section 4.3 (Water Quality).
 - I. Participate in programs to control sedimentation into and within Upper Newport Bay.
 - J. Use docent programs to actively manage and enforce CDFG regulations in marine protected areas regarding the taking of intertidal and subtidal plants and animals and to minimize incidental trampling.

- K. Manage public access as required to minimize damage to tide pools.
- L. Control upstream pollution sources from Buck Gully, Morning Canyon and storm drain runoff from local streets to the maximum extent practical to reduce sediment, nutrient, fecal coliform, and toxic pollutant loads.
- M. Implement TMDLs into Newport Bay and local watersheds to minimize water quality problems along the coastline.
- N. Prohibit invasive species and require removal in new development.
- O. Implement and enforce TMDLs in watershed and Upper Newport Bay to improve water quality in Newport Harbor.
- P. Require dredging and jetty reconstruction projects conducted within the Entrance Channel to include protection measures to avoid long-term impacts to kelp bed resources.
- Q. Continue to require Caulerpa protocol surveys as a condition of City approval for projects in Newport Bay and immediately notify the SCCAT when found.
- **4.1.3-2.** Prohibit the planting of invasive species in non-urbanized areas.
- 4.1.3-3. Prepare natural habitat protection overlays for Buck Gully ESA and Morning Canyon ESA for the purpose of providing standards to ensure both the protection and restoration of the natural habitats in these areas. Include in the overlays standards for the placement of structures, native vegetation/fuel modification buffers, and erosion and sedimentation control structures.
- 4.1.3-4. Continue to work within the Newport Bay Watershed Executive Committee structure to address sedimentation, nutrient loading, and bacteria and toxins from runoff. The Committee includes representatives from the cities of Costa Mesa, Huntington Beach, Irvine, Lake Forest, Newport Beach, Orange, Santa Ana, and Tustin, in addition to the Irvine Ranch Water District, the California Regional Water Quality Control Board (Santa Ana Region), the California Department of Fish and Game, the U.S. Army Corps of Engineers, the County of Orange, and the Irvine Company. The Watershed Executive Committee, in implementing four separate "total maximum"

daily loads" for Newport Bay, has developed and is implementing plans to control sediment, nutrients, bacteria, and toxic materials in the Bay's watershed.

- 4.1.3-5. Coordinate with the California Department of Fish and Game and the County of Orange in developing a management plan for the Upper Newport Bay Marine Park and the Upper Newport Bay Nature Preserve.
- **4.1.3-6.** Maintain public use of the Upper Newport Bay Marine Park to the extent such use is consistent with the preservation of sensitive resources.
- 4.1.3-7. Coordinate with County and State resource agencies to monitor ecological conditions within the Newport Beach Marine Conservation Area and to implement management programs to protect this marine conservation area. Maintain public use of the refuges to the extent it is consistent with the preservation of intertidal and subtidal resources.
- **4.1.3-8.** Support the construction of tide pool exhibits at the Back Bay Science Center on Shellmaker Island to provide an educational alternative to the tide pools at Corona del Mar and Crystal Cove State Park beaches.
- **4.1.3-9.** Support giant kelp reforestation programs.
- 4.1.3-10. Remove unauthorized structures that encroach into Semeniuk Slough, the Upper Newport Bay Marine Park, or other wetland areas. Prohibit future encroachment of structures into these areas unless structures are absolutely necessary for public well being. Minimize any necessary encroachment into wetland habitats to the extent feasible and permanent loss of wetlands habitat shall be mitigated.
- **4.1.3-11.** Routine maintenance of drainage courses and facilities, sedimentation basins, trails, access roads, public infrastructure, and other related facilities may be allowed if carried out in accordance with the resource protection policies of the Coastal Land Use Plan.

4.1.4 Eelgrass Meadows



Eelgrass in the Grand Canal

The flowering, marine vascular "eelgrass" plant (Zostera marina) is an important marine resource due to its nursery function for invertebrates and fishes. Eelgrass forms meadows on mudflats and subtidal sediments in bays, estuaries, and occasionally, in offshore marine sand bottom habitats. The meadows (and sub units called "beds" and "patches") provide a habitat for invertebrates as a source of food and attachment, and for marine

fishes that seek the shelter of the beds for protection and forage on invertebrates that colonize the eelgrass blades and sediments in and around eelgrass vegetation.

Eelgrass can be found worldwide in quiet, temperate-water mud or sand habitats. In Southern California, eelgrass can be found in coastal wetlands, bays, and harbors at depths between +1 feet Mean Lower Low Water (MLLW) to about -25 feet MLLW and on nearshore coastal sand bottoms to depths of 50 to 80 feet MLLW. The conditions favorable for the growth of this plant are periods of low rainfall, runoff and sedimentation, good light penetration, optimum temperature range (50 to 68 degrees Fahrenheit), moderate dissolved oxygen concentration, limited algal growth and good water quality. Once established, eelgrass patches can expand through vegetative growth along extended rhizomes to form vast meadows.

At present (2003), eelgrass is abundant in several sections of Newport Harbor and has been expanding its distribution in both Lower and Upper Newport Bay over the last several years due to favorable growing conditions, lack of heavy rainfall, minimal runoff, and more stringent water quality regulations. The lowest recorded eelgrass coverage occurred in 1993 with less than 3 acres. A 2002 survey found approximately 35 acres of eelgrass coverage. Its depth range in Newport Bay is from 0.0 ft Mean Lower Low Water (MLLW) to –28 ft. On the average, however, most eelgrass in the Bay grows to a depth of about –8 to –10 ft MLLW. It grows deepest in the Newport Harbor Entrance Channel.

Eelgrass grows extensively within the Harbor Entrance Channel, where it covers approximately 20 acres of underwater sandy bottom habitat. Other sections of

Newport Bay that currently support extensive eelgrass beds include the eastern shoreline of the Bay between Carnation Cove to the Coast Guard Base, Balboa Island (and in the Grand Canal), along the eastern end of the Balboa Peninsula, around Harbor Island, within the Linda Isle Basin, and in the channels around its perimeter. Eelgrass is currently expanding its distribution. Locations where smaller beds have become established within the last few years include the southern edge of the Bayshores development, a shoal immediately south of the Coast Highway Bridge near the Swales Marina; Lido Isle, and on the north side of Lido Reach between the Bayshores community west to the Balboa Bay Club. July 2002 observations indicate eelgrass is recolonizing shallow subtidal habitat in Upper Newport Bay between the Coast Highway Bridge and Dover Shores along both sides of the Main Channel after a long-term absence.

Some of the eelgrass currently growing in Newport Harbor is the result of previous eelgrass transplants conducted during dredging of the Entrance Channel in the early 1980s, and in the Grand Canal on Balboa Island in 1999. These transplant programs were conducted as mitigation for Newport Harbor projects that resulted in the loss of eelgrass habitat. A large-scale eelgrass restoration program is currently being planned for Newport Harbor by the U.S. Army Corps of Engineers, the County of Orange, and the City of Newport Beach with the goal of enhancing between 5 and 10 acres of eelgrass to the Harbor within eight I pilot project restoration sites starting in May 2004. This will add a significant amount of biological value to the Harbor. Once established, these restoration sites will be enhanced by further plantings and serve as eelgrass mitigation sites for the loss of eelgrass habitat for small harbor dredging projects (500 to 1000 cubic yards).

Dredging and dock and bulkhead construction projects have a potential to impact eelgrass bed resources within several areas of Newport Bay through direct habitat loss or secondary effects of turbidity or vessel anchor scarring. However, ongoing maintenance of harbor structures and periodic dredging is essential to protect the Newport Harbor's value as a commercial and recreational resource. A comprehensive and balanced management plan is necessary in order to maintain the recreational and commercial uses of the harbor while protecting its natural marine resources (see Section 4.2.5 – Eelgrass Protection and Restoration).

- **4.1.4-1.** Continue to protect eelgrass meadows for their important ecological function as a nursery and foraging habitat within the Newport Bay ecosystem.
- **4.1.4-2.** Implement eelgrass restoration and enhancement programs in Newport Harbor.
- **4.1.4-3.** Site and design boardwalks, docks, piers, and other structures that

extend over the water to avoid impacts to eelgrass meadows. Encourage the use of materials that allow sunlight penetration and the growth of eelgrass.

- 4.1.4-4. Provide for the protection of eelgrass meadows and mitigation of impacts to eelgrass meadows in a comprehensive harbor area management plan for Newport Bay.
- 4.1.4-5. Where applicable require eelgrass and Caulerpa taxifolia surveys to be conducted as a condition of City approval for projects in Newport Bay in accordance with operative protocols of the Southern California Eelgrass Mitigation Policy and Caulerpa taxifolia Survey protocols.

4.1.5 **Coastal Foredunes**

Dune habitats are identified by stands of dense to sparse annual and perennial herbs, grasses, or shrubs occurring on sand dunes along the coast. Dune habitat is considered sensitive plant community and is listed as rare or threatened or is otherwise protected by the U.S. Fish and Wildlife Service, California Department of Fish and Game, California Coastal Commission, or local agencies. Loss of dune habitat as a result of coastal development is considered Southern coastal foredune habitat on the Balboa Peninsula to be a significant environmental



impact, and any potential impacts to this resource must be avoided, minimized, or compensated.

In Newport Beach, southern coastal foredune habitat extends southwest along the ocean side of the Balboa Peninsula from 10th Street to the tip of the peninsula. The vegetation in this community is generally sparse with overall cover ranging from 20 to 70 percent in some areas, while other areas are completely devoid of vegetation. Areas of open sand fragment this habitat. Dominant plant species include non-native species such as purple sand-verbena (Abronia umbellata), sea rocket (Cakile maritima), beach evening primrose (Camissonia cheiranthifolia), sea-fig (Carpobrotus chiliensis), hottentot fig (Carpobrotus edulis), beach morning glory (Calystegia soldanella), and beach bur (Ambrosia chamissonis).

Ornamental and non-native species, likely introduced from the adjacent residences, dominate much of the southern coastal foredune habitat. Numerous residences use the beach area as an extension of their backyards. Some residents have planted and irrigated the ornamental species, which have replaced native species in these areas. Increased human activity and uncontrolled public access also adversely impact these dune habitats, as evidenced by the numerous trails bisecting the dunes. Many areas are almost completely covered by sea-fig and hottentot fig. If dune habitat losses cannot be avoided, then mitigation programs to restore dune habitat within Newport Beach should be implemented.

- **4.1.5-1.** Require the removal of exotic vegetation and the restoration of native vegetation in dune habitat.
- **4.1.5-2.** Direct public access away from dune habitat areas through the use of well-defined footpaths, boardwalks, protective fencing, signage, and similar methods.
- **4.1.5-3.** Design and site recreation areas to avoid impacts to dune habitat areas.
- **4.1.5-4.** Require a coastal development permit for earthmoving beach sand in dune habitat areas.
- **4.1.5-5.** Limit earthmoving of beach sand in dune habitat areas to projects necessary for the protection of coastal resources and existing development.



Iceplant encroachment into southern coastal foredunes

4.2 Wetlands and Deepwater Areas

Coastal Act policies related to wetlands and deepwater areas that are relevant to Newport Beach include the following:

30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

The Coastal Act distinguishes wetlands from other types of water areas, such as estuaries and open coastal waters. Section 30121 of the Coastal Act defines "wetlands" as "lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." Therefore, the interpretation of the term "shallow water" can be used to distinguish wetlands from other submerged areas. The U.S. Fish and Wildlife Service defines the boundary between wetland and deepwater habitat as the elevation of extreme low-water of spring tide for areas subject to tidal influence. Therefore, for purposes of the Coastal Act, wetlands can be interpreted as beginning at extreme low-water of spring tide and "estuary" or "open coastal water" is anything deeper.

4.2.1 Southern California Wetlands

Wetlands are transitional lands between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is often covered by shallow water during some parts of the year. Wetlands can be categorized according to specific habitat and type of vegetation. In Southern California, wetlands generally fall into four categories: estuarine wetlands, such as the Upper Newport Bay and Semeniuk Slough; freshwater marshes, which can be found in Big Canyon, Buck Gully, and San Diego Creek; riparian wetlands, which occur along creeks and streams or bodies of water; and vernal pools, which can be found on Banning Ranch.

Southern California coastal wetlands and watersheds have been dramatically altered or destroyed by human activities over the past 150 years. Wetlands have been filled and rivers, streams, and creeks have been rerouted, dammed, channelized, and paved. Estimates of historic wetland acreages compiled from the literature and U.S. Coast and Geodetic Survey maps created between 1851 and 1893 indicate a loss of 70 percent reduction in coastal wetlands in Southern California.

Wetlands are recognized as very important ecosystems with the following multiple values and functions:

- Biological Diversity. Wetlands provide important habitat for diverse communities of plants and animals, including federally listed threatened or endangered species.
- Waterfowl Habitat. Wetlands provide the principal habitat for migratory waterfowl. California provides critical wintering habitat for millions of waterfowl migrating along the Pacific Flyway, which extends from Canada to Mexico.
- <u>Fisheries</u>. Wetlands provide direct spawning and rearing habitats and food supply that supports both freshwater and marine fisheries.
- Flood Control. Wetlands detain flood flows, reducing the size and destructiveness of floods.
- Water Quality. Wetlands absorb and filter pollutants that could otherwise degrade ground water or the water quality of rivers, lakes, and estuaries.
- Ground Water Recharge. Some wetlands recharge aquifers that provide urban and agricultural water supplies.
- Recreation. Wetlands support a multi-million-dollar fishing, hunting, and outdoor recreation industry nationwide.

The Coastal Act requires the projection of wetlands. Development or alteration of coastal wetlands is primarily regulated by Section 30233 of the Coastal Act, which provides that the diking, filling, or dredging of open coastal waters, wetlands, or estuaries may only be permitted where there is no less environmentally damaging alternative and must be restricted to a narrow range of allowable uses. The Coastal Act also requires the protection of biological productivity and quality of coastal waters, streams, wetlands, estuaries, and lakes. Water quality issues are discussed in detail in Section 4.3 (Water Quality).

Two federal statutes provide the primary regulatory authority over wetlands. The Clean Water Act (Section 404(b)) regulates disposal of dredge and fill materials into waters of the United States, including all streams to their headwaters, lakes over 10 acres, and contiguous wetlands, including those above the ordinary high water mark in non-tidal waters and mean high tide in tidal waters. The River and Harbors Act of 1899 (Section 10) regulates the diking, filling, and placement of structures in navigable waterways. The U.S. Army Corps of Engineers is primarily responsible for the implementation and enforcement of rules and regulations pertaining to both sections of these statutes. The Environmental Protection

Agency, the Natural Resources Conservation Service, the National Marine Fisheries Service (NMFS), and the Fish and Wildlife Service (FWS) review applications for Section 404 permits and can provide the Corps with comments and recommendations reflecting agency concerns.

Policies:

- **4.2.1-1.** Recognize and protect wetlands for their commercial, recreational, water quality, and habitat value.
- **4.2.1-2.** Protect, maintain and, where feasible, restore the biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes.
- 4.2.1-3. Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

4.2.2 Wetland Definition and Delineation

Due to semi-arid Mediterranean climate of Southern California, some wetlands can remain dry for one or more seasons. This presents problems for the identification and delineation of wetlands. Section 30121 of the Coastal Act defines "wetlands" as "lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." However, a more specific definition is provided in Section 13577 (b-1) of the California Code of Regulations:

"...land where the water table is at near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentration of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some during each year and their location within, or adjacent to vegetated wetland or deepwater habitats."

The boundary line between the wetland and adjacent upland area is determined by the extent of one or more key wetland characteristics: hydrology (frequency, duration, and timing of inundation or saturation), hydric soils (soil with characteristics resulting from prolonged saturation), and hydrophytic vegetation (plants adapted to life in water, or in periodically flooded and/or saturated anaerobic soils). Positive wetland indicators of all three characteristics are normally present in wetlands. However, the presence of only one of these characteristics (e.g., hydrology, hydric soils, or hydrophytic vegetation) is needed for an area to qualify as a wetland, pursuant to the California Code of Regulations.

Hydrology is the key characteristic because it drives the formation of hydric soils and allows hydrophytic vegetation to establish dominance. However, hydrology is the most difficult of the three wetland characteristics to quantify. Many of the hydrology indicators are subjective and often it is difficult to determine the timing and duration of hydrology without visual observation. Therefore, the Coastal Commission considers a predominance of hydrophytes or a predominance of hydric soils as evidence that the land was "wet enough long enough" to develop wetland characteristics.

- 4.2.2-1. Define wetlands as areas where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils or to support the growth of hydrophytes. Such wetlands can include areas where vegetation is lacking and soil is poorly developed or absent as a result of frequent drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentration of salts or other substances in the substrate. Wetlands do not include areas which in normal rainfall years are permanently submerged (streams, lakes, ponds and impoundments), nor marine or estuarine areas below extreme low water of spring tides.
- 4.2.2-2. Require a survey and analysis with the delineation of all wetland areas when the initial site survey indicates the presence or potential for wetland species or indicators. Wetland delineations will be conducted in accordance with the definitions of wetland boundaries contained in section 13577(b) of the California Code of Regulations.
- 4.2.2-3. Require buffer areas around wetlands of a sufficient size to ensure the biological integrity and preservation of the wetland that they are designed to protect. Wetlands shall have a minimum buffer width of 100 feet wherever possible. Smaller wetland buffers may be allowed only where it can be demonstrated that 1) a 100-foot wide buffer is not possible due to site-specific constraints, and 2) the proposed narrower buffer would be amply protective of the biological integrity of the wetland given the site-specific characteristics of the resource and of the type and intensity of disturbance.

4.2.3 Dredging, Diking, and Filling

Coastal Act policies related to dredging, diking, or filling that are relevant to Newport Beach include the following:

30233. (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

- (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
- (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
- (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
- (4) Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
- (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
- (6) Restoration purposes.
- (7) Nature study, aquaculture, or similar resource-dependent activities.
- (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems.
- (c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division. For the purposes of this section, "commercial fishing facilities in Bodega Bay" means that not less than 80 percent of all boating facilities proposed to be developed or improved, where such improvement would create additional berths in Bodega Bay, shall be designed and used for commercial fishing activities.

Upper Newport Bay

Newport Bay is an estuary, an embayment along the coast where inland fresh water mixes with salt water from the ocean. Newport Bay's main source of fresh water is San Diego Creek. Historically only about 15 square miles of land drained into the bay via San Diego Creek. However, San Diego Creek was channelized in 1968 so that peak floods and sediment could be efficiently routed to the bay. This increased the drainage area to about 118 square miles. In 1969, heavy storm runoff poured hundreds of thousands of tons of sediment into the bay.

Subsequent storm season sedimentation events in 1978 and 1980 caused shallowing of the Upper Bay. Intertidal saltmarsh vegetation became established and expanded rapidly. This would have eventually filled the bay with sediment and turned it into meadow.

In 1985, 85 acres of the Upper Bay were dredged out to create the Unit I Sediment Control Basin (depths -3 to -7 feet MSL). A second dredging San Diego Creek near Back Bay Drive project in 1988 created the 37-acre



Unit II Sediment Control Basin, just south of the Main Dike (depth -14 feet MSL). Both basins have worked well, collecting large volumes of coarser grained sediment from periodic flood runoff, principally down San Diego Creek. However, these require extensive on-going maintenance dredging. The last major dredging activity in the bay occurred in 1998-99. This project cleared about 900,000 cubic yards of sediment from the bay. As the 1998-99 project was completed, Newport Beach, Orange County, the Irvine Ranch Water District, the Santa Ana Regional Water Quality Control Board, The Irvine Company, the California Department of Fish and Game, and the watershed cities of Irvine, Costa Mesa, Tustin, Lake Forest, and Laguna Woods, began planning a larger, more significant project with the U.S. Army Corps of Engineers to complete the restoration of the Upper Newport Bay.

The Upper Newport Bay Ecosystem Restoration Project was developed to restore and maintain tidal movement in the bay. The project would dredge more than 2.7 million cubic yards from the Upper Bay, restore deteriorated habitat, increase bluewater views, move the Least Tern islands, and open up several island channels in mid-Upper Bay.



Upper Newport Bay

Lower Newport Bay/Harbor



The Turning Basin

Since Lower Newport Bay was dredged between 1934 and 1936 to create the navigation channels, the U.S. Army Corps of Engineers has dredged the Lower Bay on only three occasions. In 1941 they deepened the turning basin at the west end of the harbor (Lido Village area). In 1981, 85,000 cubic yards of sand were dredged from the harbor entrance adjacent to Big Corona. In 1998, 204,000 cubic meters of sediment are removed from just below the Pacific Coast Highway Bridge at the junction of the Main

and Upper Bay Channels in the area of Harbor and Linda Islands. Except for these three projects, maintenance dredging by the Corps to maintain the federally authorized harbor channels has not been undertaken. As part of their maintenance responsibility, the Corps does annual Newport Bay condition surveys of the navigational channels to ascertain whether the channels are at or near their design depth and whether additional dredging is necessary.

There are approximately 1,200 harbor permits for both residential and commercial docks within Newport Harbor. It is general policy that the responsibility for dredging around and under private docks rests with the private property owner. In the past, the City has secured a Regional General Permit in order to expedite property owners' permit processing with the Corps and the California Coastal Commission. The Regional General Permits' term is typically 5 to 10 years.

- **4.2.3-1.** Permit the diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes in accordance with other applicable provisions of the LCP, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects and limited to the following:
 - A. Construction or expansion of port/marine facilities.
 - B. Construction or expansion of coastal-dependent industrial facilities, including commercial fishing facilities, and

commercial ferry facilities.

- C. In open coastal waters, other than wetlands, including estuaries and streams, new or expanded boating facilities, including slips, access ramps, piers, marinas, recreational boating, launching ramps, and pleasure ferries, and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
- D. Maintenance of existing and restoration of previously dredged depths in navigational channels, turning basins, vessel berthing, anchorage, and mooring areas, and boat launching ramps. The most recently updated U.S. Army Corps of Engineers maps shall be used to establish existing Newport Bay depths.
- E. Incidental public service purposes which temporarily impact the resources of the area, such as burying cables and pipes, inspection of piers, and maintenance of existing intake and outfall lines.
- F. Sand extraction for restoring beaches, except in environmentally sensitive areas.
- G. Restoration purposes.
- H. Nature study, aquaculture, or similar resource-dependent activities.
- I. In the Upper Newport Bay Marine Park, permit dredging, diking, or filling only for the purposes of wetland restoration, nature study, or to enhance the habitat values of environmentally sensitive areas.
- **4.2.3-2.** Continue to permit recreational docks and piers as an allowable use within intertidal areas in Newport Harbor.
- **4.2.3-3.** Continue support of the Upper Newport Bay Ecosystem Restoration Project to restore the Upper Newport Bay to its optimal ecosystem.
- **4.2.3-4.** Require dredging and dredged material disposal to be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation.

- **4.2.3-5.** Secure federal funding for the Upper Newport Bay Ecosystem Restoration Project.
- **4.2.3-6.** Secure permanent use designation for the LA-3 sediment disposal site for future dredging projects.
- **4.2.3-7.** Require the following mitigation measures for dredging projects in the Upper Newport Bay Marine Park:
 - A. Dredging and spoils disposal must be planned and carried out to limit turbidity and to avoid significant disruption to marine and wildlife habitats and water circulation.
 - B. Maintenance dredging shall be encouraged where the dredging enhances commercial or recreational use of the Bay. When dredged material is of an appropriate grain size and grain percentage, this material may be used to restore or replace natural sandy sloping beaches in order to retain the current profiles of Newport Bay. Maintenance dredging activity shall have the approval of the U.S. Army Corps of Engineers and shall meet applicable U.S. Environmental Protection Agency standards.
 - C. Dredged material not suitable for beach nourishment or other permitted beneficial reuse shall be disposed of offshore at a designated U.S. Environmental Protection Agency disposal site or at an appropriate upland location.
 - D. Temporary dewatering of dredged spoils may be authorized within the Bay's drainage if adequate erosion controls are provided and the spoils are removed. A bond or a contractual arrangement shall be a precondition to dredging of the material, and final disposal of the dewatered material on the approved dump site shall be accomplished within the time period specified in the permit.
 - E. Dredged spoils shall not be used to fill riparian areas, wetlands, or natural canyons.
 - F. Other mitigation measures may include opening areas to tidal action, removing dikes, improving tidal flushing, restoring salt marsh or eelgrass vegetation, or other restoration measures.
 - G. Dredge spoils suitable for beach nourishment should be

transported for such purposes to appropriate beaches or into suitable longshore current systems provided that the placement is permitted by a Section 404 permit.

- **4.2.3-8.** Continue to cooperate with the U.S. Army Corps of Engineers in their maintenance and delineation of federal navigational channels at Newport Harbor in the interest in providing navigation and safety.
- **4.2.3-9.** Continue to secure Regional General Permits through the U.S. Army Corps of Engineers and the California Coastal Commission to expedite permit processing for residential and commercial dock owners in the Bay.
- **4.2.3-10.** Seek permits authorizing maintenance dredging under and around residential piers and floats subject to compliance with all conditions to the current Regional General Permit, including grain size requirements, availability of suitable dredge disposal site, and periodic bioassays.
- **4.2.3-11.** Require the following minimum mitigation measures if a project involves diking or filling of a wetland:
 - A. If an appropriate mitigation site is available, the applicant shall submit a detailed plan which includes provisions for (1) acquiring title to the mitigation site; (2) "in-kind" wetland restoration or creation where possible; (3) where "out-of-kind" mitigation is necessary, restoration or creation of wetlands that are of equal or greater biological productivity to the wetland that was filled or dredged; and (4) dedication of the restored or created wetland and buffer to a public agency, or permanent restriction of their use to open space purposes.

Adverse impacts shall be mitigated at a ratio of 3:1 for impacts to seasonal wetlands, freshwater marsh and riparian areas, and at a ratio of 4:1 for impacts to vernal pools and saltmarsh (the ratio representing the acreage of the area to be restored/created to the acreage of the area diked or filled), unless the applicant provides evidence establishing, and the approving authority finds, that restoration or creation of a lesser area of wetlands will fully mitigate the adverse impacts of the dike or fill project. However, in no event shall the mitigation ratio be less than 2:1 unless, prior to the development impacts, the mitigation is completed and is empirically demonstrated to meet performance criteria that establish that the created or restored wetlands are functionally

equivalent or superior to the impacted wetlands. The mitigation shall occur on-site wherever possible. Where not possible, mitigation should occur in the same watershed. The mitigation site shall be purchased and legally restricted and/or dedicated before the dike or fill development may proceed.

- B. The applicant may, in some cases, be permitted to open equivalent areas to tidal action or provide other sources of surface water in place of creating or restoring wetlands pursuant to paragraph A. This method of mitigation would be appropriate if the applicant already owns, or can acquire, filled or diked areas which themselves are not environmentally sensitive habitat areas but which would become so if such areas were opened to tidal action or provided with other sources of surface water.
- C. However, if no appropriate sites under options (A) and (B) are available, the applicant shall pay an in-lieu fee of sufficient value to an appropriate public agency for the purchase and restoration of an area of equivalent productive value, or equivalent surface area.

This third option would be allowed only if the applicant is unable to find a willing seller of a potential restoration site. The public agency may also face difficulties in acquiring appropriate sites even though it has the ability to condemn property. Thus, the in-lieu fee shall reflect the additional costs of acquisition, including litigation, as well as the cost of restoration. If the public agency's restoration project is not already approved by the City, the public agency may need to be a co-applicant for a permit to provide adequate assurance that conditions can be imposed to assure that the purchase of the mitigation site shall occur prior to issuance of the permit. In addition, such restoration must occur in the same general region (e.g., within the same estuary) where the fill occurred.

4.2.3-12. All preferred restoration programs would remove fill from a formerly productive wetland or estuary that is now biologically unproductive dry land and would establish a tidal prism necessary to assure adequate flushing. Since restoration projects necessarily involve many uncertainties, restoration should precede the diking or filling project. At a minimum, permits will be conditioned to assure that restoration will occur simultaneously with project construction. Restoration and management plans shall be submitted with the permit application.

- 4.2.3-13. Where impacts to wetlands are allowed, require monitoring of mitigation measures for a period of sufficient time to determine if mitigation objectives and performance standards are being met. Mid-course corrections shall be implemented if necessary to meet the objectives or performance standards. Require the submittal of monitoring reports during the monitoring period that document the success or failure of the mitigation. To help insure that the mitigation project is self-sustaining, final monitoring for all mitigation projects shall take place after at least three years with no remediation or maintenance activities other than weeding. If performance standards are not met by the end of the prescribed monitoring period, the monitoring period shall be extended or the applicant shall submit an amendment application proposing alternative mitigation measures and implement the approved changes. Unless it is determined by the City that a differing mitigation monitoring schedule is appropriate. it is generally anticipated that monitoring shall occur for a period of not less than five years.
- **4.2.3-14.** Require that any project that includes diking, filling or dredging of a wetland or estuary, as permitted pursuant to Policy 4.2.3-1, maintain the functional capacity of the wetland or estuary. Functional capacity means the ability of the wetland or estuary to be self-sustaining and to maintain natural species diversity. In order to establish that the functional capacity is being maintained, the applicant must demonstrate all of the following:
 - A. That the project does not alter presently occurring plant and animal populations in the ecosystem in a manner that would impair the long-term stability of the ecosystem; i.e., natural species diversity, abundance, and composition are essentially unchanged as a result of the project.
 - B. That the project does not harm or destroy a species or habitat that is rare or endangered.
 - C. That the project does not harm a species or habitat that is essential to the natural biological functioning of the wetland or estuary.
 - D. That the project does not significantly reduce consumptive (e.g., fishing, aquaculture and hunting) or non-consumptive (e.g., water quality and research opportunity) values of the wetland or estuarine ecosystem.

- **4.2.3-15.** Require new development on the waterfront to design and site docking facilities in relationship to the water's depth and accessibility.
- **4.2.3-16.** Design and site all structures permitted to encroach into open coastal waters, wetlands, and estuaries to harmonize with the natural appearance of the surrounding area.
- 4.2.3-17. Continue to limit residential and commercial structures permitted to encroach beyond the bulkhead line to piers and docks used exclusively for berthing of vessels. However, this policy shall not be construed to allow development that requires the filling of open coastal waters, wetlands or estuaries that would require mitigation for the loss of valuable habitat in order to place structures closer to the bulkhead line or create usable land areas.
- **4.2.3-18.** Require restoration plans to be reviewed and approved by a qualified professional prior to accepting sites for mitigation.



Balboa Island Channel

4.2.4 Dredge Spoils Disposal

Coastal Act policies related to dredge spoils disposal that are relevant to Newport Beach include the following:

30233. (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems.

(d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients which would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for such purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

Section 30233(b) of the Coastal Act requires that dredge spoils be disposed of in a manner that avoids disruption to habitats. The selection of a disposal site for dredged sediments is dependent physical and chemical upon the characteristics of the material. Material free of chemical contamination and consisting primarily of sand of an acceptable (usually grain size approximately 80 percent sand) is generally suitable for beach nourishment and placed on appropriate beaches or within suitable longshore currents. Material of appropriate grain



Dredging project in Balboa Island Channel

size and with minimal contamination may be disposed of at unconfined, openwater disposal sites authorized by the U.S. Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers. Dredged material that is physically suitable, but is chemically unsuitable for aquatic disposal due to of elevated levels of certain contaminants, may be used as fill, or in certain wetland construction and habitat improvement projects, provided the contaminated materials are confined (e.g., parking lots, container piers, etc.).

Periodic maintenance dredging and habitat restoration projects in Newport Bay require an environmentally acceptable disposal site. However, due to grain size incompatibility, most of this material will not be suitable for beach nourishment. Upland disposal is generally cost-prohibitive and harbor landfill and habitat improvement projects occur too infrequently to be a reliable disposal option. Therefore, the most practical solution is a nearby offshore disposal site. The LA-3 Ocean Dredged Material Disposal Site (ODMDS) is located approximately 4 miles



Disposal of dredge material off of West Newport

off the coast of Newport Beach. The LA-3 site has been historically used for the disposal of dredged material from Newport Bay and for material not suitable for beach nourishment at Newport Beach due to grain size incompatibility. The LA-3 ODMDS was designated as an interim site for the disposal of dredged material by the EPA. Securing LA-3 ODMS as a permanently designated disposal site is therefore essential to the projection of Newport Bay as а commercial, recreational and ecological resource.

Erosion control and flood control facilities constructed on water courses can impede the movement of sediment and nutrients which would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for such purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

Monitoring dredging projects within the region can provide opportunities to reduce disposal costs and utilize dredge spoils for beach nourishment. By placing the sediment on the beach, offshore disposal costs are eliminated and the nourishment project provides a tangible benefit from the dredging operation. In 1992, a nourishment project was devised to reduce disposal costs and to take advantage of the large quantities of beach-grade sand from the Lower Santa Ana River Flood Control Channel Expansion Project. Nearly 1.3 million cubic yards of dredged material were deposited offshore of Newport Beach, which migrated to West Newport beaches under the influence of waves and currents.

- **4.2.4-1.** Cooperate with the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers to secure LA-3 ODMDS as a permanently designated disposal site.
- **4.2.4-2.** Monitor dredging projects within the region to identify opportunities to reduce disposal costs and utilize dredge spoils for beach nourishment.

- **4.2.4-3.** Dredged materials suitable for beneficial reuse shall be transported for such purposes to appropriate areas and placed in a manner that minimizes adverse effects on the environment.
- **4.2.4-4.** Participate in regional sediment management by maintaining records of the number of channelized streams, miles of channelization in streams, volumes of sediment extracted from stream channels and debris basins, and the grain size distribution of the extracted sediments.
- **4.2.4-5.** Material removed from erosion control and flood control facilities suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.

4.2.5 Eelgrass Protection and Restoration

Eelgrass (Zostera marina) is an important underwater plant that is indicative of and supports a healthy and diverse marine environment (see Section 4.1.4 -Eelgrass Meadows). Dredaina projects in the Lower Bay have the potential to impact eelgrass bed resources. The loss of eelgrass as a result of coastal development is considered to be environmental significant impact, and any potential impacts to this resource must be avoided, minimized. or Currently, mitigation requires an expensive and time-consuming



mitigated. Eelgrass in the Newport Harbor Entrance Channel

procedure that requires the eelgrass to be replanted, monitored, and maintained per the *Southern California Eelgrass Mitigation Policy*. This policy was developed in 1991 by the National Marine Fisheries Service, U.S. Fish and Wildlife Service, and the California Department of Fish and Game in order to standardize and maintain a consistent policy regarding mitigating adverse impacts to eelgrass resources. The policy typically requires that for every square foot of eelgrass removed, 1.2 square feet must be planted and maintained. Eelgrass mitigation monitoring is required for a period of 5 years for most projects.

The City, the County of Orange, and the U.S. Army Corps of Engineers have worked with various resource agencies (including the U.S. Fish and Wildlife

Service, the National Marine Fisheries Service, and the California Department of Fish and Game) to develop a plan whereby the City and the County of Orange would establish, monitor, and maintain eelgrass beds. The eelgrass restoration program is intended to enhance between 5 and 10 acres of eelgrass to the Harbor within eight pilot restoration sites. Once deemed successful, these eight sites will serve as eelgrass mitigation sites for City projects and as a mitigation bank from which eelgrass mitigation credits will be issued to private property owners for eelgrass removal resulting from dock and channel dredging projects.

The Southern California Eelgrass Mitigation Policy provides detailed procedures for mitigating adverse impacts to eelgrass resources. However, the policy contains no provision for post-recovery conditions. The policy was drafted at a time when eelgrass coverage was near a low point in Newport Harbor. At present (2003), eelgrass is abundant in several sections of Newport Harbor and has been expanding its distribution in both Lower and Upper Newport Bay. The policy requires all eelgrass patches to be protected or replaced, regardless of its size, location, or habitat value or the extent of eelgrass coverage within the harbor. Eelgrass protection, mitigation, and monitoring complicate and substantially increase the cost of dredging maintenance projects, which are essential to protecting the Newport Harbor's value as a commercial and recreational resource.



Eelgrass restoration

The City developina conceptual eelgrass mitigation program that will address the establishment of eelgrass acreage baselines for Newport Harbor. The baseline would be the minimum acreage, based on the distribution. density, and productivity, necessary for eelgrass meadows to fulfill their ecological function. Once the baseline is determined, projects mav be aranted exemptions the Southern to California **Eelgrass** Mitigation Policy mitigation requirements, provided the eelgrass acreage

baseline is maintained. The National Marine Fisheries Service, as the lead agency, would need to incorporate such a provision into *Southern California Eelgrass Mitigation Policy* and the U.S. Army Corps of Engineers, the Coastal Commission, and the Santa Ana Regional Water Quality Control Board to incorporate the provision into the City's Regional General Permit and into any individual property owner's dredging or dock construction permit that qualifies under future applications. The establishment of a baseline for eelgrass meadows will serve to protect their important ecological function while allowing the periodic

dredging that is essential to protect the Newport Harbor's value as a commercial and recreational resource. The eelgrass mitigation program is conceptual in nature and will need further review and agency approval. **Policies:**

- **4.2.5-1.** Avoid impacts to eelgrass (*Zostera marina*) to the greatest extent possible. Mitigate losses of eelgrass at a 1.2 to 1 mitigation ratio and in accordance with the *Southern California Eelgrass Mitigation Policy*. Encourage the restoration of eelgrass throughout Newport Harbor where feasible.
- **4.2.5-2.** Continue to cooperate with the County of Orange, the U.S. Army Corps of Engineers, and resource agencies to establish eelgrass restoration sites.
- **4.2.5-3.** Conduct studies to establish an eelgrass acreage baseline for Newport Harbor based on the distribution, density, and productivity, necessary for eelgrass meadows to fulfill their ecological function.
- **4.2.5-4.** Cooperate with the National Marine Fisheries Service to incorporate a provision into the *Southern California Eelgrass Mitigation Policy* that would allow exemptions to mitigation requirements for harbor maintenance projects for provided the eelgrass acreage baseline is maintained.
- 4.2.5-5. Cooperate with the U.S. Army Corps of Engineers, the Coastal Commission, and the Santa Ana Regional Water Quality Control Board to incorporate the eelgrass acreage baseline exemption provision into the City's Regional General Permit and into any individual property owner's dredging or dock construction permit that qualifies under future applications.
- **4.2.5-6.** Perform periodic surveys of the distribution of eelgrass in Newport Bay in cooperation with the National Marine Fisheries Services to insure that the eelgrass baseline is maintained.
- 4.2.5-7. Cooperate with resource agencies to conduct a comprehensive evaluation of biological, recreational, commercial and aquatic resources of Newport Harbor and to develop a Harbor Area Management Plan (HAMP) that will maintain all of the intended beneficial uses of the harbor.

4.3 Water Quality

Coastal Act policies related to water quality that are relevant to Newport Beach include the following:

30230. Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

30232. Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur

Newport Beach's greatest resources are its coastline and bay. They have drawn people here since prehistoric times, were the preeminent factor in the community's founding and development, and continue provide the community to with employment, recreation, natural habitat. and a beautiful physical setting. With these gifts great come great responsibilities for the protection and enhancement of these resources. Newport Beach has traditionally cared greatly about the quality of the water in Newport Bay and along the ocean



Shoreline near Balboa Pier

shoreline and has embarked on a number of programs to improve the water quality.

4.3.1 TMDLs

Newport Bay receives urban runoff from the Newport Bay watershed, an area that includes unincorporated County territory and areas within the cities of Costa Mesa, Laguna Woods, Lake Forest, Irvine, Newport Beach, Orange, Santa Ana, and Tustin. The primary tributaries to Newport Bay are the Santa Ana/Delhi Channel (draining the cities of Costa Mesa and Santa Ana), San Diego Creek (draining the cities of Irvine, Laguna Woods, Lake Forest, portions of Newport Beach, Orange, and Tustin), and Big Canyon Creek (draining Newport Beach).

Newport Bay is designated as "water quality-limited" for four impairments under the Federal Clean Water Act's Section 303(d) List, meaning that it is "not reasonably expected to attain or maintain water quality standards" due to these impairments without additional regulation. As a water quality-limited body, the California Regional Water Quality Control Board, Santa Ana Region ("Regional Board") and the U.S. Environmental Protection Agency ("U.S. EPA") have developed total maximum daily loads ("TMDLs") for the following substances: sediment, nutrients, fecal coliform, and toxic pollutants. The Board included these TMDLs in the Regional Board's Basin Plan for the region.

<u>Sediment</u>. Adopted on October 9, 1998, the Sediment TMDL requires local partners (stakeholders in the watershed) to survey the Bay regularly and to reduce annual sediment coming into the Bay from 250,000 cubic yards to 125,000 cubic yards (a 50% reduction) by 2008. The TMDL's goal is to reduce dredging frequency in Upper Newport Bay to once every 20 years. Part of the TMDL includes a proposed Upper Newport Bay Ecosystem Restoration Project, a U.S. Army Corps of Engineers-led ecosystem restoration project that attempts to restore the Upper Bay to its optimal habitat.

<u>Nutrients</u>. Approved by U.S. EPA on April 16, 1999, the Nutrient TMDL limits nitrogen and phosphorus inputs to the Bay. The Nutrient TMDL attempts to reduce the annual loading of nitrogen by 50% -- from 1,400 pounds per day today to approximately 850 to 802 pounds per day at San Diego Creek – by 2012. Phosphorus loading must fall from 86,912 pounds per year in 2002 to 62,080 pounds by 2007.

<u>Fecal Coliform</u>. Approved in December 1999, the Fecal Coliform TMDL attempts to reduce the amount of fecal coliform inputs to the Bay enough to make the Bay meet water contact recreation (*REC1*) standards (swimming, wading, surfing) by 2014 and shellfish harvesting (*SHEL*) standards (where waters support shellfish acceptable for human consumption) by 2020.

<u>Toxic Pollutants</u>. Adopted by U.S. EPA on June 14, 2002, the Toxic Pollutants TMDL addresses Bay inputs like heavy metals (chromium, copper, lead, cadmium, zinc) and priority organics like (endosulfan, DDT, Chlordane, PCBs, Toxaphene, diazinon, chlorpyriphos, more). It may lead to the reduction or elimination of pesticide use by residents, businesses, and municipal services in the watershed. Some controls will be placed on heavy metals. The Toxic Pollutants TMDL also addresses existing toxic deposits in sediments in Rhine Channel and other areas in the Lower Bay.

To implement the obligations of the TMDLs and to partner on related water quality issues, Newport Beach, the Regional Board, the California Department of Fish and Game, the County of Orange, and the other cities in the Newport Bay watershed

have established the Newport Bay Watershed Executive Committee as advised by the Watershed Management Committee (WEC and WMC).

The WMC typically meets quarterly to comply with the TMDLs established by the Regional Board. Generally, all the TMDLs established by the Regional Board require that watershed-based solutions be developed by the watershed stakeholders, and then the stakeholders jointly fund and implement these projects throughout the watershed.

- **4.3.1-1.** Continue to develop and implement the TMDLs established by the Regional Board and guided by the Newport Bay Watershed Executive Committee (WEC).
- **4.3.1-2.** Secure funding for the Upper Newport Bay Ecosystem Restoration Project.
- 4.3.1-3. Establish and protect a long-term funding source for the regular dredging of Upper Newport Bay and dredging of the Lower Newport Bay so that the City and its watershed partners achieve the goals and directives of the Sediment and Nutrient TMDLs adopted for Newport Bay.
- **4.3.1-4.** Preserve, or where feasible, restore natural hydrologic conditions such that downstream erosion, natural sedimentation rates, surface flow, and groundwater recharge function near natural equilibrium states.
- **4.3.1-5.** Require development on steep slopes or steep slopes with erosive soils to implement structural best management practices (BMPs) to prevent or minimize erosion consistent with any load allocation of the TMDLs adopted for Newport Bay.
- **4.3.1-6.** Require grading/erosion control plans to include soil stabilization on graded or disturbed areas.
- 4.3.1-7. Require measures be taken during construction to limit land disturbance activities such as clearing and grading, limiting cut-and-fill to reduce erosion and sediment loss, and avoiding steep slopes, unstable areas, and erosive soils. Require construction to minimize disturbance of natural vegetation, including significant trees, native vegetation, root structures, and other physical or biological features important for preventing erosion or sedimentation.

4.3.1-8. Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

4.3.2 NPDES



Catch basin screens and filters

The City of Newport Beach operates a municipal separate storm sewer system (MS4). The City's MS4 is permitted by the Regional Board under the National Pollutant Discharge Elimination System (NPDES). The City's MS4 permit is extensive in its obligation to keep waterways clean bγ reducing eliminating contaminants from stormwater and dry-weather runoff. MS4 permits require an aggressive Water Quality Ordinance (Ord. specific 97-26). municipal practices to maintain city facilities like the MS4, and the use of

"best management practices" (BMPs) in many residential, commercial, and development-related activities to further cut runoff. MS4 permits also require local agencies to cooperatively develop a public education campaign to let more people know about what they can do at home and at work to protect water quality.

- **4.3.2-1.** Promote pollution prevention and elimination methods that minimize the introduction of pollutants into coastal waters, as well as the generation and impacts of dry weather and polluted runoff.
- **4.3.2-2.** Require that development not result in the degradation of coastal waters (including the ocean, estuaries and lakes) caused by changes to the hydrologic landscape.
- **4.3.2-3.** Support and participate in watershed-based runoff reduction and other planning efforts with the Regional Board, the County of Orange, and upstream cities.
- **4.3.2-4.** Continue to update and enforce the Newport Beach Water Quality Ordinance consistent with the MS4 Permit.

- **4.3.2-5.** Develop and maintain a water quality checklist to be used in the permit review process to assess potential water quality impacts.
- **4.3.2-6.** Implement and improve upon best management practices (BMPs) for residences, businesses, new development and significant redevelopment, and City operations.
- **4.3.2-7.** Incorporate BMPs into the project design in the following progression:
 - Site Design BMPs.
 - Source Control BMPs.
 - Treatment Control BMPs.

Include site design and source control BMPs in all developments. When the combination of site design and source control BMPs are not sufficient to protect water quality as required by the LCP or Coastal Act, structural treatment BMPs will be implemented along with site design and source control measures.

- **4.3.2-8.** To the maximum extent practicable, runoff should be retained on private property to prevent the transport of bacteria, pesticides, fertilizers, pet waste, oil, engine coolant, gasoline, hydrocarbons, brake dust, tire residue, and other pollutants into recreational waters.
- **4.3.2-9.** To the maximum extent practicable, limit the use of curb drains to avoid conveying runoff directly to the City's street drainage system without the benefit of absorption by permeable surfaces and natural treatments such as landscaped areas and planters.
- **4.3.2-10.** Provide storm drain stenciling and signage for new storm drain construction in order to discourage dumping into drains.
- **4.3.2-11.** Require new development to minimize the creation of and increases in impervious surfaces, especially directly connected impervious areas, to the maximum extent practicable. Require redevelopment to increase area of pervious surfaces, where feasible.
- **4.3.2-12.** Require development to protect the absorption, purification, and retention functions of natural drainage systems that exist on the site, to the maximum extent practicable. Where feasible, design drainage

and project plans to complement and utilize existing drainage patterns and systems, conveying drainage from the developed area of the site in a non-erosive manner. Disturbed or degraded natural drainage systems should be restored, where feasible.

- **4.3.2-13.** Site development on the most suitable portion of the site and design to ensure the protection and preservation of natural and sensitive site resources by providing for the following:
 - A. Protecting areas that provide important water quality benefits, areas necessary to maintain riparian and aquatic biota and/or that are susceptible to erosion and sediment loss;
 - B. Analyzing the natural resources and hazardous constraints of planning areas and individual development sites to determine locations most suitable for development;
 - C. Preserving and protecting riparian corridors, wetlands, and buffer zones;
 - D. Minimizing disturbance of natural areas, including vegetation, significant trees, native vegetation, and root structures;
 - E. Ensuring adequate setbacks from creeks, wetlands, and other environmentally sensitive habitat areas;
 - F. Promoting clustering of development on the most suitable portions of a site by taking into account geologic constraints, sensitive resources, and natural drainage features
 - G. Utilizing design features that meet water quality goals established in site design policies.
- **4.3.2-14.** Whenever possible, divert runoff through planted areas or sumps that recharge the groundwater dry wells and use the natural filtration properties of the earth to prevent the transport of harmful materials directly into receiving waters.
- **4.3.2-15.** Where infiltration of runoff would exacerbate geologic hazards, include equivalent BMPs that do not require infiltration.
- **4.3.2-16.** Require structural BMPs to be inspected, cleaned, and repaired as necessary to ensure proper functioning for the life of the development. Condition coastal development permits to require

ongoing application and maintenance as is necessary for effective operation of all BMPs (including site design, source control, and treatment control).

- **4.3.2-17.** Utilize permeable surfaces that permit the percolation of urban runoff in non-sidewalk areas within the City's parkway areas, to the maximum extent practicable.
- **4.3.2-18.** Condition coastal development permits to require the City, property owners, or homeowners associations, as applicable, to sweep permitted parking lots and public and private streets frequently to remove debris and contaminated residue.
- **4.3.2-19.** Require parking lots and vehicle traffic areas to incorporate BMPs designed to prevent or minimize runoff of oils and grease, car battery acid, coolant, gasoline, sediments, trash, and other pollutants to receiving waters.
- **4.3.2-20.** Require commercial development to incorporate BMPs designed to prevent or minimize the runoff of pollutants from structures, landscaping, parking areas, loading and unloading dock areas, repair and maintenance bays, and vehicle/equipment wash areas.
- **4.3.2-21.** Require service stations, car washes and vehicle repair facilities to incorporate BMPs designed to prevent or minimize runoff of oil and grease, solvents, car battery acid, coolant, gasoline, and other pollutants to stormwater system from areas including fueling areas, repair and maintenance bays, vehicle/equipment wash areas, and loading/unloading dock areas.
- **4.3.2-22.** Require beachfront and waterfront development to incorporate BMPs designed to prevent or minimize polluted runoff to beach and coastal waters.
- 4.3.2-23. Require new development applications to include a Water Quality Management Plan (WQMP). The WQMP's purpose is to minimize to the maximum extent practicable dry weather runoff, runoff from small storms (less than 3/4" of rain falling over a 24-hour period) and the concentration of pollutants in such runoff during construction and post-construction from the property.
- **4.3.2-24.** To further reduce runoff, direct and encourage water conservation via the use of weather- and moisture-based irrigation controls, tiered water consumption rates, and native or drought-tolerant plantings in

residential, commercial, and municipal properties to the maximum extent practicable.

4.3.2-25. Effectively communicate water quality education to residents and businesses, including the development of a water quality testing lab and educational exhibits at the Back Bay Science Center on Shellmaker Island.

4.3.3 Sanitary Sewer Overflows

The City of Newport Beach owns and wastewater а collection system that collects residential and commercial wastewater and transports it, using a system of 20 pump stations, for treatment by the Orange County Sanitation District. Residences and businesses -- when permitted by the City -- hook up private lateral lines to the City's collection lines. Private and public lines and the City's pump stations have the potential to cause sanitary sewer overflows (SSOs).



Main Channel

SSOs lead to several beach closures in and around Newport Beach each year. State law (AB 411, Wayne) requires local health officials to close receiving waters to recreational uses when health officials know of or suspect that an SSO could reach recreational waters. As such, SSOs in Newport Beach and in inland cities can cause closures to Newport Beach's waters.

Most SSOs in the area are caused by line blockages. The primary causes of line blockages are grease and root clogs. Newport Beach has adopted regulations for the disposal of grease and other insoluble waste discharges from commercial food preparation facilities to prevent blockages of the sewer system and is investigating alternative grease control methods.

As a part of the City's Sewer System Management Plan (SSMP), the City's Utilities Department follows a defined Sewer Master Plan to replace or reline older wastewater lines. Newport Beach also uses remote cameras in sewer lines to look for pipe cracks, root intrusion, and grease buildup to assist in prioritizing the line replacement program.

Maintenance failures of plumbing associated with pump stations are another leading cause of SSOs. Newport Beach's Sewer Master Plan includes upgrades

of its pump stations, including replacing pump stations with gravity systems where possible. Upgraded pump stations also include spill-warning systems with multiple communication methods (radio, telephone, pager, and direct line to the City's Utilities yard) to inform Utilities staff of any malfunction.

Public education plays an important role in preventing and controlling SSOs. Through water billing and other means, the City reminds the public -- and especially restaurants -- to clean sewer laterals often, maintain private grease control systems, keep roots under control, and to immediately report SSOs.

- **4.3.3-1.** Develop and implement sewer system management plans to replace or reline older wastewater lines and upgrade pump stations.
- **4.3.3-2.** Conduct additional public education reminding property owners and food preparation facilities to clean sewer laterals often, maintain private grease control systems, keep roots under control, and to immediately report SSOs.
- **4.3.3-3.** Require waste discharge permits with all food preparation facilities that produce grease and require such permits to include:
 - Agreements to follow appropriate BMPs;
 - Maximum grease intrusion levels:
 - Maintenance/posting of appropriate educational material;
 - Maintenance log for laterals (at least quarterly);
 - Maintenance of a log for any grease control device or vat;
 - Funding for regular compliance inspections;
 - Acknowledgement of City's ability to fine for non-compliance.
- **4.3.3-4.** Monitor food preparation facilities via waste discharge permits and monitor spill reduction progress.
- **4.3.3-5.** Participate with other sewer collection and treatment agencies to investigate alternatives to grease interceptors.
- **4.3.3-6.** Continue to renovate all older sewer pump stations and install new plumbing according to most recent standards.
- **4.3.3-7.** Comply with the Regional Board's Waste Discharge Requirements (WDRs) associated with the operation and maintenance of a sewage collection system.

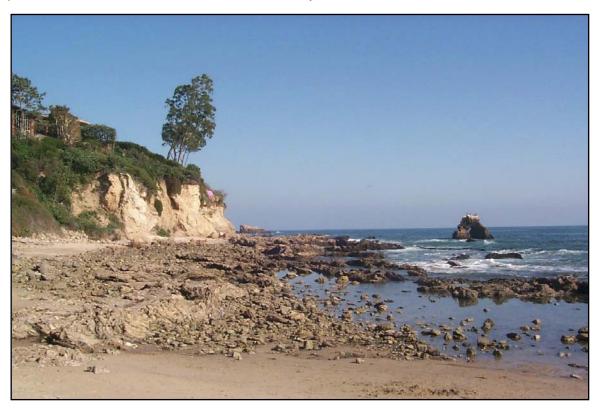
4.4 Scenic and Visual Resources

Coastal Act policies related to scenic and visual resources that are relevant to Newport Beach include the following:

30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

4.4.1 Coastal Views

Newport Beach is located in a unique physical setting that provides a variety of spectacular coastal views, including those of the open waters of the ocean and bay, sandy beaches, rocky shores, wetlands, canyons, and coastal bluffs. The City has historically been sensitive to the need to protect and provide access to these scenic and visual resources and has developed a system of public parks, piers, trails, and viewing areas. Coastal views are also provided from a number of streets and highways and, due to the grid street pattern in West Newport, Balboa Peninsula, Balboa Island, and Corona del Mar, many north-south tending streets provide view corridors to the ocean and bay.



Little Corona

- 4.4.1-1. Protect and, where feasible, enhance the scenic and visual qualities of the coastal zone, including public views to and along the ocean, bay, and harbor and to coastal bluffs and other scenic coastal areas.
- **4.4.1-2.** Design and site new development, including landscaping, so as to minimize impacts to public coastal views.
- **4.4.1-3.** Design and site new development to minimize alterations to significant natural landforms, including bluffs, cliffs and canyons.



Oceanfront Boardwalk at 25th Street Beach

- **4.4.1-4.** Where appropriate, require new development to provide view easements or corridors designed to protect public coastal views or to restore public coastal views in developed areas.
- **4.4.1-5.** Where feasible, require new development to restore and enhance the visual quality in visually degraded areas.
- **4.4.1-6.** Protect public coastal views from the following roadway segments:
 - Backbay Drive.
 - Balboa Island Bridge.
 - Bayside Drive from Coast Highway to Linda Island Drive.
 - Bayside Drive at Promontory Bay.
 - Coast Highway/Santa Ana River Bridge.
 - Coast Highway/Newport Boulevard Bridge and Interchange.
 - Coast Highway from Newport Boulevard to Marino Drive.
 - Coast Highway/Newport Bay Bridge.
 - Coast Highway from Jamboree Road to Bayside Drive.
 - Eastbluff Drive from Jamboree Road to Backbay Drive.
 - Irvine Avenue from Santiago Drive to University Drive.
 - Jamboree Road from Eastbluff Drive/University Drive to State Route 73.
 - Jamboree Road in the vicinity of the Big Canyon Park.
 - Jamboree Road from Coast Highway to Bayside Drive.
 - Lido Island Bridge.

- Newport Boulevard from Hospital Road/Westwinster Avenue to Via Lido Drive.
- Newport Center Drive from Newport Center Drive E/W to Farallon Drive/Granville Drive.
- Ocean Boulevard.
- State Route 73 from Bayview Way to University Drive.
- Superior Avenue from Hospital Road to Coast Highway.
- University Drive from Irvine Avenue to the Santa Ana Delhi Channel.
- **4.4.1-7.** Design and site new development, including landscaping, on the edges of public coastal view corridors, including those down public streets, to frame and accent public coastal views.
- **4.4.1-8.** Require that buildings be located and sites designed to provide clear views of and access to the Harbor and Bay from the Coast Highway and Newport Boulevard rights-of-way in accordance with the following principles, as appropriate:
 - Clustering of buildings to provide open view and access corridors to the Harbor.
 - Modulation of building volume and masses.
 - Variation of building heights.
 - Inclusion of porticoes, arcades, windows, and other "see-through" elements in addition to the defined open corridor.
 - Minimization of landscape, fencing, parked cars, and other nonstructural elements that block views and access to the Harbor.
 - Prevention of the appearance of the public right-of-way being walled off from the Harbor.
 - Inclusion of setbacks that in combination with setbacks on adjoining parcels cumulatively form functional view corridors.
 - Encouragement of adjoining properties to combine their view corridors that achieve a larger cumulative corridor than would have been achieved independently.
 - A site-specific analysis shall be conducted for new development to determine the appropriate size, configuration, and design of the view and access corridor that meets these objectives, which shall be subject to approval in the coastal development plan review process.
- **4.4.1-9.** Design and maintain parkway and median landscape improvements in public rights-of-way so as not to block public coastal views at maturity.

- **4.4.1-10.** Where feasible, provide public trails, recreation areas, and viewing areas adjacent to public coastal view corridors.
- **4.4.1-11.** Restrict development on sandy beach areas to those structures directly supportive of visitor-serving and recreational uses, such as lifeguard towers, recreational equipment, restrooms, and showers. Design and site such structures to minimize impacts to public coastal views.

4.4.2 Bulk and Height Limitation



Homes on the Balboa Peninsula

Concern over the intensity of around development Lower Newport Bay led to the adoption of a series of ordinances in the early 1970s that established more restrictive height and bulk development standards around the bay. The intent was to regulate the visual and physical mass of structures consistent with the unique character and visual scale of Newport Beach. As a result, new development within the Shoreline Height Limitation Zone is limited to a height of 35 feet. Residential development is

limited to a height of 24 to 28 feet and non-residential development is limited to a height of 26 to 35 feet. Outside of the Shoreline Height Limitation Zone, heights up to 50 feet are permitted within the planned community districts. There are also two properties in the coastal zone that are within the High Rise Height Limitation Zone, which are permitted heights up to 375 feet. The first is the site of Newport Beach Marriott Hotel in Newport Center; the other is an undeveloped office site northeast of the Jamboree Road/State Route 73 interchange.

Floor areas are strictly limited citywide. In the coastal zone, residential development is limited to floor areas ranging from 1.5 to 2.0 times the buildable area of the parcel (the land minus required setback yards), which typically translates to actual floor area ratios of 0.95 to 1.35. Nonresidential development floor area ratios range from 0.30 to 1.25.

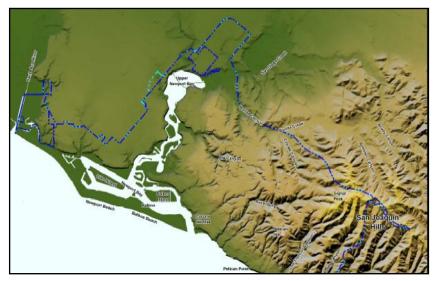
- **4.4.2-1.** Maintain the 35-foot height limitation in the Shoreline Height Limitation Zone, as graphically depicted on Map 4-3.
- **4.4.2-2.** Continue to regulate the visual and physical mass of structures consistent with the unique character and visual scale of Newport Beach.
- 4.4.2-3. Implement the regulation of the building envelope to preserve public views through the height, setback, floor area, lot coverage, and building bulk regulation of the Zoning Code in effect as of October 13, 2005 that limit the building profile and maximize public view opportunities.
- **4.4.2-4.** Prohibit projections associated with new development to exceed the top of curb on the bluff side of Ocean Boulevard. Exceptions for minor projections may be granted for chimneys and vents provided the height of such projections is limited to the minimum height necessary to comply with the Uniform Building Code.

4.4.3 Natural Landform Protection

Newport Beach coastal zone contains a number of distinctive topographic features. The central and northwestern portions of the City are situated on a broad mesa that extends southeastward to join the San Joaquin Hills, commonly known as Newport Mesa. This upland has been deeply dissected by stream erosion, resulting in moderate to steep bluffs along the Upper Newport Bay estuary, one of the most striking and biologically diverse natural features in Orange County. The nearly flat-topped mesa rises from about 50 to 75 feet above mean sea level at the northern end of the estuary in the Santa Ana Heights area, to about 100 feet above sea level in the Newport Heights, Westcliff, and Eastbluff areas.

Along the southwestern margin of the City, sediments flowing from the Santa Ana River and San Diego Creek, the two major drainage courses that transect the mesa, have formed the beaches, sandbars, and mudflats of Newport Bay and West Newport. These lowland areas were significantly modified during the last century in order to deepen channels for navigation and form habitable islands. Balboa Peninsula, a barrier beach that protects the bay, was once the site of extensive low sand dunes.

In the southern part of the City, the San Joaquin Hills rise abruptly from the sea, separated from the present shoreline by a relatively flat, narrow shelf. Originally formed by wave abrasion, this platform (also called a terrace) is now elevated well above the water and is bounded by steep bluffs along the shoreline. The



Geomorphic map of Newport Beach

coastal platform occupied by Corona Del Mar ranges from about 95 to 100 feet above sea level.

The bluffs, cliffs, hillsides, canyons, and other significant natural landforms are an important part of the scenic and visual qualities of the coastal zone and are to be protected as a resource of public importance.

Coastal Bluffs

Coastal bluffs are formed by a rapid uplift of the shore relative to sea level. Coastal bluffs are evolvina landforms. dvnamic. Coastal bluffs can be impacted by processes at both the bottom and top of the cliffs. Pounding by waves during high tide and storm surges can undercut the base and lead to eventual collapse of the bluff. Bluffs are also shaped by wind, surface runoff, and ground water erosion (see Sections 2.8.3, 2.8.5, and 2.8.6).



Coastal bluffs are a prominent Upper Newport Bay coastal bluffs landform in Newport Beach. There

are ocean facing coastal bluffs along the shoreline of Corona del Mar, Shorecliffs, and Cameo Shores. There are also coastal bluffs facing the wetlands of Upper Newport Bay, Semeniuk Slough, and the degraded wetlands of the Banning Ranch property. Finally, there are coastal bluffs surrounding Lower Newport Bay. These can be seen along Coast Highway from the Semeniuk Slough to Dover Drive and in Corona del Mar above the Harbor Entrance. These bluffs faced the open ocean before the Balboa Peninsula formed and are now generally separated from the shoreline. Coastal bluffs are considered significant scenic and environmental resources and are to be protected.

Most of the coastal bluff top lands have been subdivided and developed over the years. However, many have been preserved as parkland and other open space. Also, most of the faces of the coastal bluff surrounding the Upper Newport Bay have been protected by dedication to the Upper Newport Bay Nature Preserve or dedicated as open space as part of the Castaways, Eastbluff, Park Newport, Newporter North (Harbor Cove), and Bayview Landing planned residential developments. In other areas, including Dover Shores, Corona del Mar, Shorecliffs, and Cameo Shores, the coastal bluffs fall within conventional residential subdivisions. Development on these lots occurs mainly on a lot-by-lot basis. As a result, some coastal bluffs remain pristine and others are physically or visually obliterated by structures, landform alteration or landscaping.

Development restrictions, including setbacks, must be established to ensure geologic stability while addressing current patterns of development. Where the bluff is subject to marine erosion, development on bluff top lots must be set back at least 25 feet from the bluff edge. On bluff top lots where the bluff is not subject to marine erosion, the setback from the bluff edge should be based on the predominant line of existing development along the bluff edge in each neighborhood. These bluff edge setbacks may be increased to maintain sufficient distance to ensure stability, ensure that it will not be endangered by erosion, and to avoid the need for protective devices during the economic life of the structure (75 years).

Development on the bluff face is generally prohibited, with exceptions for certain public improvements or private improvements determined to be consistent with the predominant line of development.

Corona del Mar is one of the few areas in the coastal zone where there is extensive development of the bluff face; specifically, residential development on Avocado Avenue, Pacific Drive, Carnation Avenue, and Ocean Boulevard. The initial subdivision and development of these areas occurred prior to the adoption of policies and regulations intended to protect coastal bluffs and other landforms. Development in these areas is allowed to continue on the bluff face to be consistent with the existing development pattern and to protect coastal views from the bluff top. However, development on the bluff face is controlled to minimize further alteration.

The bluffs along Bayside Drive were at one time exposed to the Lower Newport Bay. However, these bluffs separated from the shoreline when abutting tidelands were filled and reclaimed in the 1920s and later developed into the communities of Promontory Bay, Beacon Bay, and Bayside. Later development of Irvine Terrace and Promontory Point cut and filled these bluffs. Development in these areas is subject to setbacks established for bluffs not subject to marine erosion.



Little Corona sea cave and bluffs

Coastal Canyons

There are three significant canyons in the coastal zone, Big Canyon, Buck Gully, and Morning Canyon. The steep slopes and vegetation of these canyons are distinctive features on the shoreline of the ocean and bay. Big Canyon is protected as a nature park. However, Buck Gully and Morning Canyon are under private ownership and there is extensive residential development on the slopes of both canyons. Therefore, any effort to protect and enhance the visual quality of these canyons will require the cooperation of the property owners.

Buck Gully development

Other Landforms

Some of the edges of Newport Mesa and the San Joaquin Hills are located a considerable distance from the shoreline, but are still highly visible from

public view points, roadways, or the water. These areas have moderate to steep slopes, accentuated in places by gullies, ravines, and rock outcroppings. In order to protect the overall visual quality of the coastal zone, new development in these areas need to be sited and designed to minimize the alteration of natural land forms and to be visually compatible with the character of surrounding areas.

- **4.4.3-1.** Require new planned communities to dedicate or preserve as open space the coastal bluff face and an area inland from the edge of the coastal bluff adequate to provide safe public access and to avoid or minimize visual impacts.
- 4.4.3-2. Maintain approved bluff edge setbacks for the coastal bluffs within the planned communities of Castaways, Eastbluff, Park Newport, Newporter North (Harbor Cove), and Bayview Landing to ensure the preservation of scenic resources and geologic stability.
- 4.4.3-3. Require all new bluff top development located on a bluff subject to marine erosion to be sited in accordance with the predominant line of existing development in the subject area, but not less than 25 feet from the bluff edge. This requirement shall apply to the principal structure and major accessory structures such as guesthouses and pools. The setback shall be increased where necessary to ensure

safety and stability of the development.

- 4.4.3-4. On bluffs subject to marine erosion, require new accessory structures such as decks, patios and walkways that do not require structural foundations to be sited in accordance with the predominant line of existing development in the subject area, but not less than 10 feet from the bluff edge. Require accessory structures to be removed or relocated landward when threatened by erosion, instability or other hazards.
- 4.4.3-5. Require all new bluff top development located on a bluff not subject to marine erosion to be set back from the bluff edge in accordance with the predominant line of existing development in the subject area. This requirement shall apply to the principal structure and major accessory structures such as guesthouses and pools. The setback shall be increased where necessary to ensure safety and stability of the development.
- 4.4.3-6. On bluffs not subject to marine erosion, require new accessory structures such as decks, patios and walkways that do not require structural foundations, to be set back from the bluff edge in accordance with the predominant line of existing accessory development. Require accessory structures to be removed or relocated landward when threatened by erosion, instability or other hazards.
- 4.4.3-7. Require all new development located on a bluff top to be setback from the bluff edge a sufficient distance to ensure stability, ensure that it will not be endangered by erosion, and to avoid the need for protective devices during the economic life of the structure (75 years). Such setbacks must take into consideration expected long-term bluff retreat over the next 75 years, as well as slope stability. To assure stability, the development must maintain a minimum factor of safety of 1.5 against landsliding for the economic life of the structure.
- 4.4.3-8. Prohibit development on bluff faces, except private development on coastal bluff faces along Ocean Boulevard, Carnation Avenue and Pacific Drive in Corona del Mar determined to be consistent with the predominant line of existing development or public improvements providing public access, protecting coastal resources, or providing for public safety. Permit such improvements only when no feasible alternative exists and when designed and constructed to minimize alteration of the bluff face, to not contribute to further erosion of the

bluff face, and to be visually compatible with the surrounding area to the maximum extent feasible.

- 4.4.3-9. Where principal structures exist on coastal bluff faces along Ocean Boulevard, Carnation Avenue and Pacific Drive in Corona del Mar, require all new development to be sited in accordance with the predominant line of existing development in order to protect public coastal views. Establish a predominant line of development for both principle structures and accessory improvements. The setback shall be increased where necessary to ensure safety and stability of the development.
- 4.4.3-10. The coastal bluffs along Bayside Drive that have been cut and filled by the Irvine Terrace and Promontory Point developments are no longer subject to marine erosion. New development on these bluffs is subject to the setback restrictions established for bluff top development located on a bluff not subject to marine erosion.
- **4.4.3-11.** Require applications for new development to include slope stability analyses and erosion rate estimates provided by a licensed Certified Engineering Geologist or Geotechnical Engineer.
- **4.4.3-12.** Employ site design and construction techniques to minimize alteration of coastal bluffs to the maximum extent feasible, such as:
 - A. Siting new development on the flattest area of the site, except when an alternative location is more protective of coastal resources.
 - B. Utilizing existing driveways and building pads to the maximum extent feasible.
 - C. Clustering building sites.
 - D. Shared use of driveways.
 - E. Designing buildings to conform to the natural contours of the site, and arranging driveways and patio areas to be compatible with the slopes and building design.
 - F. Utilizing special foundations, such as stepped, split level, or cantilever designs.
 - G. Detaching parts of the development, such as a garage from a

dwelling unit.

- H. Requiring any altered slopes to blend into the natural contours of the site.
- **4.4.3-13.** Require new development adjacent to the edge of coastal bluffs to incorporate drainage improvements, irrigation systems, and/or native or drought-tolerant vegetation into the design to minimize coastal bluff recession.
- **4.4.3-14.** Require swimming pools located on bluff properties to incorporate leak prevention and detection measures.
- **4.4.3-15.** Design and site new development to minimize the removal of native vegetation, preserve rock outcroppings, and protect coastal resources.
- **4.4.3-16.** Design land divisions, including lot line adjustments, to minimize impacts to coastal bluffs.
- **4.4.3-17.** Identify and remove all unauthorized structures, including protective devices, fences, and stairways, which encroach into coastal bluffs.
- 4.4.3-18. Establish canyon development setbacks based on the predominant line of existing development for Buck Gully and Morning Canyon. Do not permit development to extend beyond the predominant line of existing development by establishing a development stringline where a line is drawn between nearest adjacent corners of existing structures on either side of the subject property. Establish development stringlines for principle structures and accessory improvements.

Note: See Sections 2.8.6 and 2.8.7 for technical submittal requirements on beach, bluff and canyon properties.



Corona del Mar coastal bluffs

4.4.4 Signs and Utilities

The City has adopted special sign regulations for the Mariner's Mile commercial district and for the Balboa Peninsula. These sign regulations include limitations on freestanding and roof signs, which have the greatest potential to impact coastal scenic and visual resources.

In some of the older neighborhoods, electrical, telephone, cable television, and other utility lines are still located above ground. The City requires utilities to be placed underground in all



Overhead utilities were placed underground in Balboa Village

new developments and has ongoing programs to remove and underground overhead utilities through the establishment of underground utility districts.

- **4.4.4-1.** Design and site signs, utilities, and antennas to minimize visual impacts to coastal resources.
- **4.4.4-2.** Continue to implement the special sign regulations in Mariner's Mile and on the Balboa Peninsula.
- **4.4.4-3.** Update sign regulations for the West Newport, Marine Avenue, and Corona del Mar commercial areas.
- **4.4.4-4.** Implement programs to remove illegal signs and amortize legal nonconforming signs.
- **4.4.4-5.** Prohibit new billboards and roof top signs and regulate the bulk and height of other freestanding signs that affect public coastal views. Heritage signs are not subject to this restriction.
- **4.4.4-6.** Continue to require new development to underground utilities.
- **4.4.4-7.** Continue programs to remove and underground overhead utilities.

4.5 Paleontological Cultural Resources

Coastal Act policies related to paleontological, archaeological, and historical Resources that are relevant to Newport Beach include the following:

30244. Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

4.5.1 Paleontological and Archaeological Resources

Orange County's geologic history began 175 - 145 million years ago, in the Middle to Late Jurassic Period. The oldest rocks in Orange County are located in the central Santa Ana Mountains and contain fossils such as radiolarians, ammonites and bivalves. These types of rocks and fossils indicate that this area was under the ocean. Therefore, for most of its geologic history, Orange County was underwater.

During the Miocene Epoch (26 – 7 million years ago) tectonic forces produced mountain uplifts, initiated movement on the nascent San Andreas fault system, and formed numerous coastal marine basins, including the Los Angeles Basin, of which most of Orange County is a part. Orange County became a shallow bay as the sea retreated. Miocene fossils are from both marine and land organisms, as the area was a shallow sea surrounded by jungles and savannas.

Tectonic forces began to uplift the land during the Pliocene (7 - 2.5 million years ago). The sea began to slowly recede from the coast. Each successive shoreline is represented today by a marine terrace and can be seen in Corona del Mar today. Three marine terraces can be seen north of Corona del Mar by driving toward the beach on MacArthur Boulevard. Sandstone deposited in the Newport Beach area in the late Pliocene contains a wealth of marine mammals, sea birds and a variety of seashells.

The seas continued to regress during the cooler Pleistocene (2.5 million – 15,000 years ago), and tectonic forces continued to uplift the land. Although the Pleistocene Epoch is called the "Ice Age," glacial ice never reached Southern California. A heavily vegetated, marshy area extended inland beyond the shoreline, and a great variety of vertebrate Ice Age animals lived in the area. Fossils of Ice Age horses, elephants, bison, antelopes and Dire wolves have been found at sites near the Castaways.

The first generally accepted period of human occupation of the Southern California began around the end of the Pleistocene, about 10,000 to 12,000 years ago. Some of the evidence of the earliest human occupation in Orange County was found at archaeological sites around the Upper Newport Bay.



Tongva steatite bowl recovered from a development site

These and other archaeological sites in Newport Beach present evidence that highly mobile and resourceful people lived here as far back as 9,500 years ago. A village site excavated in Newporter North was occupied at various times over 5,500 years. Archaeological excavations indicate that the earliest people followed the seasonal migration of animals and collected a wide variety of wild plant resources. Later inhabitants were

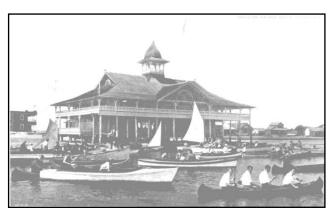
more sedentary, hunting sea mammals, small and large terrestrial mammals, fish, bird, and shellfish.

- **4.5.1-1.** Require new development to protect and preserve paleontological and archaeological resources from destruction, and avoid and minimize impacts to such resources. If avoidance of the resource is not feasible, require an in situ or site-capping preservation plan or a recovery plan for mitigating the effect of the development.
- 4.5.1-2. Require a qualified paleontologist/archeologist to monitor all grading and/or excavation where there is a potential to affect cultural or If grading operations or excavations paleontological resources. uncover paleontological/archaeological resources, require paleontologist/archeologist monitor to suspend all development activity to avoid destruction of resources until a determination can be made as to the significance of the paleontological/ archaeological resources. If resources are determined to be significant, require submittal of a mitigation plan. Mitigation measures considered may range from in-situ preservation to recovery and/or relocation. Mitigation plans shall include a good faith effort to avoid impacts to cultural resources through methods such as, but not limited to, project redesign, in situ preservation/capping, and placing cultural resource areas in open space.
- **4.5.1-3.** Notify cultural organizations, including Native American organizations, of proposed developments that have the potential to adversely impact cultural resources. Allow qualified representatives of such groups to monitor grading and/or excavation of development sites.

- 4.5.1-4. Where in situ preservation and avoidance are not feasible, require new development to donate scientifically valuable paleontological or archaeological materials to a responsible public or private institution with a suitable repository, located within Orange County, whenever possible.
- 4.5.1-5. Where there is a potential to affect cultural or paleontological resources, require the submittal of an archeological/cultural resources monitoring plan that identifies monitoring methods and describes the procedures for selecting archeological and Native American monitors and procedures that will be followed if additional or unexpected archeological/cultural resources are encountered during development of the site. Procedures may include, but are not limited to, provisions for cessation of all grading and construction activities in the area of the discovery that has any potential to uncover or otherwise disturb cultural deposits in the area of the discovery and all construction that may foreclose mitigation options to allow for significance testing, additional investigation and mitigation.
- **4.5.1-6.** Continue to protect Upper Newport Bay cliff faces to serve as a reference section for micropaleontological studies.

4.5.2 Historical Resources

Newport Beach has a number of buildings and sites in the coastal zone that are representative of the history of the community and the region. Some of these historical resources have been recognized as being of statewide or national importance. There are four properties in Newport Beach that are listed as California Historical Landmarks:



Early photograph of the Balboa Pavilion

- Old Landing (No. 198). Established by Captain Dunnells in the 1870's, it was the site of the first shipping business in Newport Bay.
- Site Of First Water-To-Water Flight (No. 775). Commemorates the May 10, 1912 flight of Glenn L. Martin from the waters of the Pacific Ocean at Balboa to Catalina Island, the first water-to-water flight.

- McFadden Wharf (No. 794). The site of the original wharf built in 1888 by the McFadden brothers.
- Balboa Pavilion (No. 959). Built in 1905, it is one of California's last surviving examples of the great waterfront recreational pavilions from the turn of the century.

There are also three properties that are listed in the *National Register of Historic Places*:

- Balboa Inn. Built in 1929, the Balboa Inn is representative of Spanish Colonial Revival architecture and beachfront tourist development.
- Balboa Pavilion. Built in 1905, the Balboa Pavilion is one of California's last surviving examples of the great waterfront recreational pavilions from the turn of the century.
- Lovell Beach House. Built in 1926, the Lovell Beach House was designed by Rudolf Schindler and is considered the first pure International Style house built in America.

Four additional properties are also listed as historic or potentially historic in the California Historic Resources Information System (CHRIS) maintained by the Office of Historic Preservation:

- B.K. Stone Building—one of the oldest commercial structures in Newport Beach.
- Balboa Island Firehouse No. 4—early police and fire station for the Balboa Peninsula.
- Bank of Balboa/Bank of America—Bank of Balboa, Bank of America, provided services from 1928 to 1984 (now demolished).
- Our Lady of Mount Carmel Church.

The City of Newport Beach has also listed seven properties in the *Newport Beach Register of Historical Property* in recognition of their local historical or architectural significance. In addition to the Balboa Pavilion and the Balboa Inn, the *Newport Beach Register of Historical Property* includes:

 Rendezvous Ballroom Site. Destroyed by fire in 1966, the Rendezvous Ballroom was a popular Balboa dance hall that featured numerous famous Big Bands of the 1930's and 1940's.

- Wilma's Patio (formally Pepper's Restaurant). Located on Balboa Island, the exposed structural components of Pepper's Restaurant are timbers used in the original Balboa Island Bridge and McFadden Wharf.
- <u>Balboa Theater</u>. Built in 1928, the Balboa Theater is a former vaudeville theater that one time housed an infamous speakeasy during Prohibition.
- Balboa Saloon. The 1924 building is representative of Newport's nautical history and Main Street commercial masonry style.



Dory Fishing Fleet

The Dory Fishing Fleet is located adjacent to Newport Pier. The fleet and open-air fish market has operated there since its founding by a Portuguese fisherman in 1891. The last remaining fleet of its type, it is a historical landmark designated by the Newport Beach Historical Society. It is a general policy of the City that an area immediately west of the Newport Pier be reserved for the Newport Dory Fishing Fleet.

- **4.5.2-1.** Maintain and periodically update the *Newport Beach Register of Historical Property* for buildings, objects, structures, and monuments having importance to the history or architecture of Newport Beach and require photo documentation of inventoried historic structures prior to demolition.
- **4.5.2-2.** Provide incentives, such as granting reductions or waivers of

applications fees, permit fees, and/or any liens placed by the City to properties listed in the *National or State Register* or the *Newport Beach Register of Historical Property* in exchange for preservation easements.

4.5.2-3. Continue to allow the Dory Fishing Fleet to be launched and stored and to sell fish on the public beach adjacent to Newport Pier within reasonable limits to protect the historical character of the fleet, the coastal access and resources, and the safety of beach users in the vicinity.

4.6 Environmental Review



Coastal bluff revegetation at Inspiration Point

The protection of coastal resources and protection from coastal hazards requires that applications for new development undergo appropriate environmental review. In most cases, the City conducts this review through implementation of the California Environmental Quality Act.

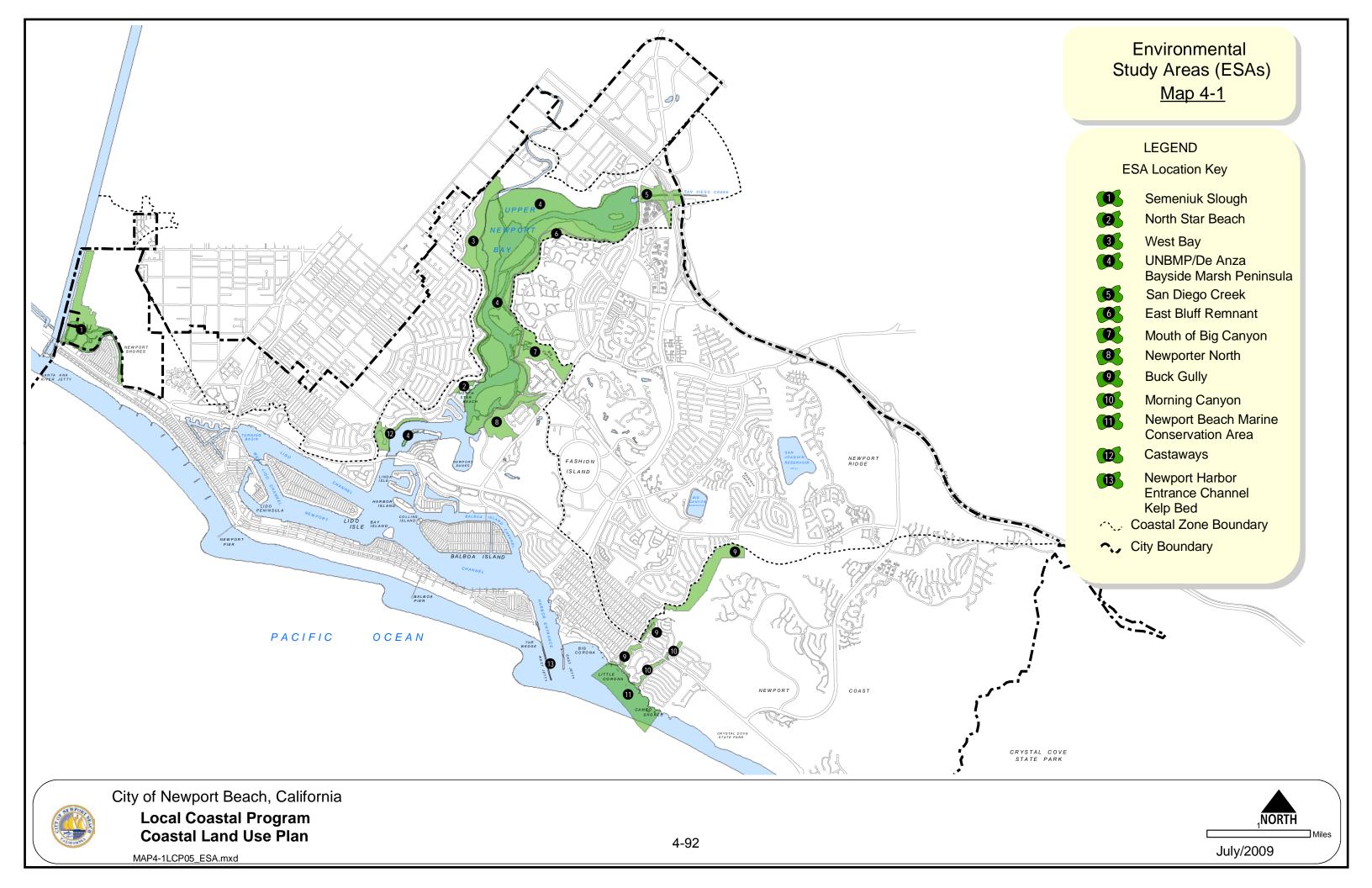
The California Environmental Quality Act (CEQA) requires the state to review the environmental impacts of projects that require state or local government approval. CEQA requires appropriate mitigation of projects that contain significant environmental impacts.

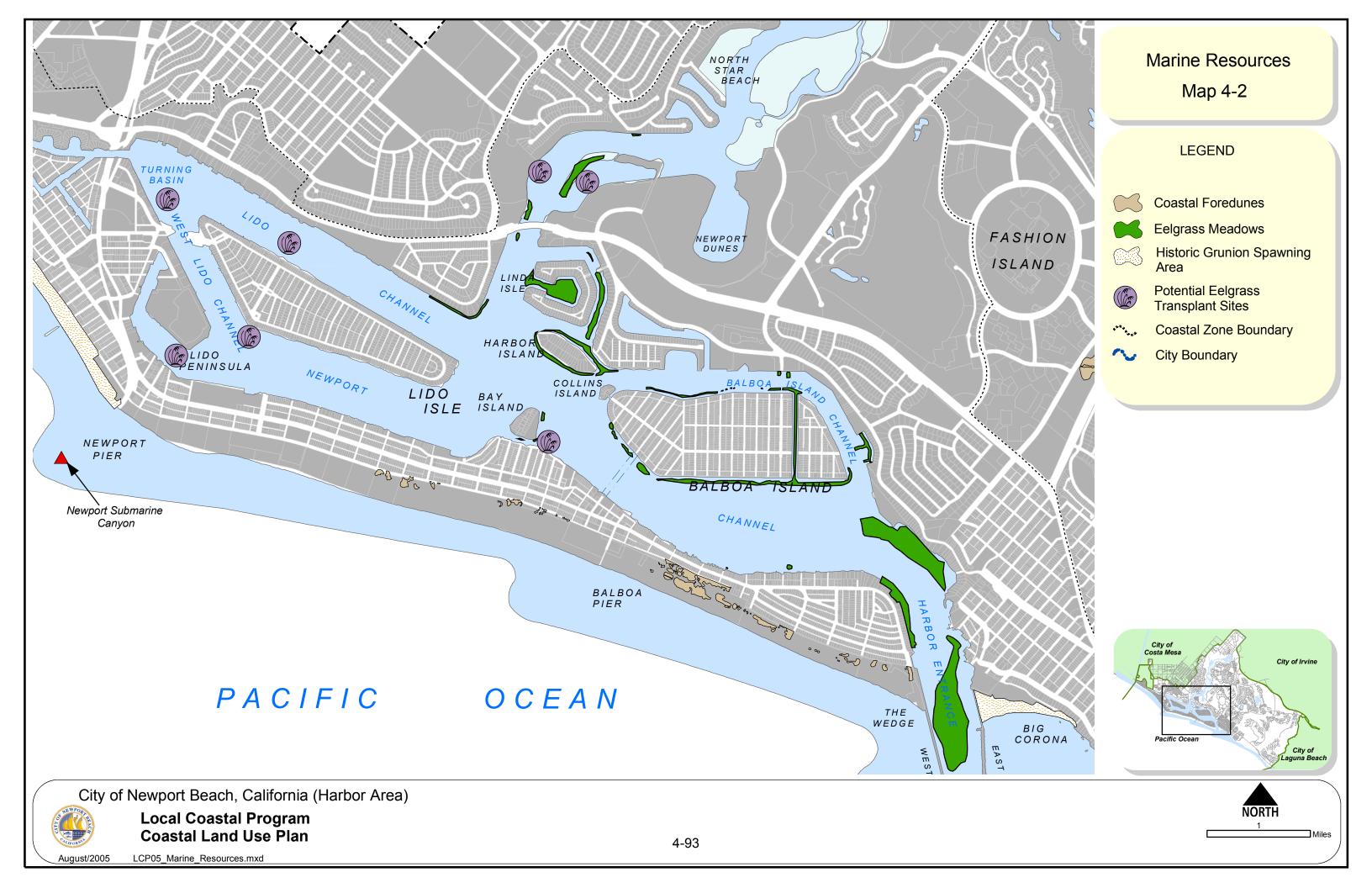
Specifically, CEQA states that agencies must identify potential environmental impacts, alter projects to avoid such impacts where feasible, seek alternatives that will minimize unavoidable impacts, and require mitigation for any unavoidable impacts that are necessary. CEQA mandates that the responsible agencies consider a reasonable range of project alternatives that offer substantial environmental advantages over the project proposal. CEQA adds that the agency responsible for the project's approval must deny approval if there would be "significant adverse effects" when feasible alternatives or feasible mitigation measures could substantially lessen such effects.

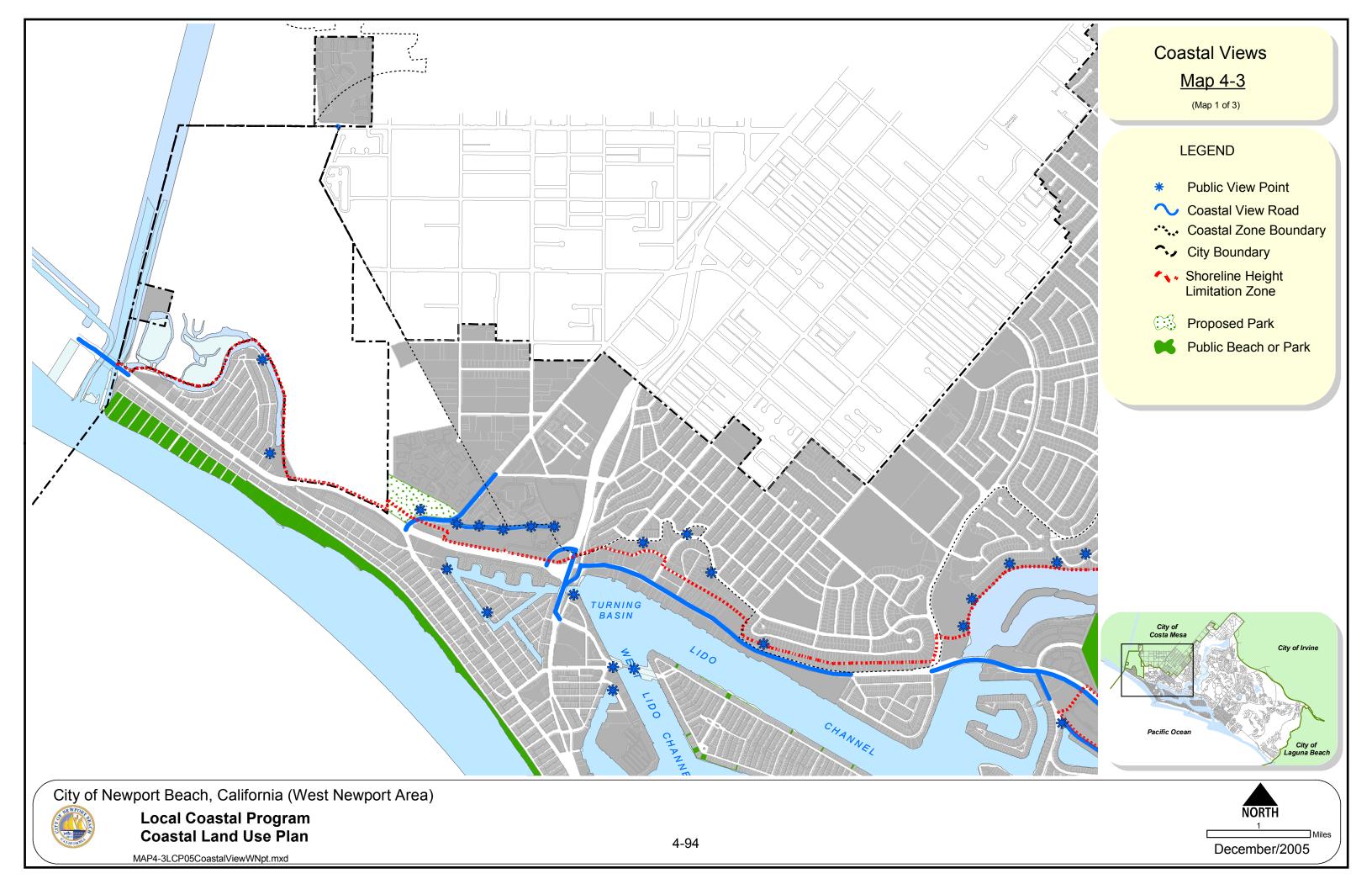
To ensure consistency with the resource protection policies of the Coastal Land Use Plan, applications for new development subject to coastal development permit requirements will be reviewed by qualified City staff, contracted employee/consultant and/or advisory committee in accordance with the CEQA requirements, as well as those contained in the Local Coastal Program.

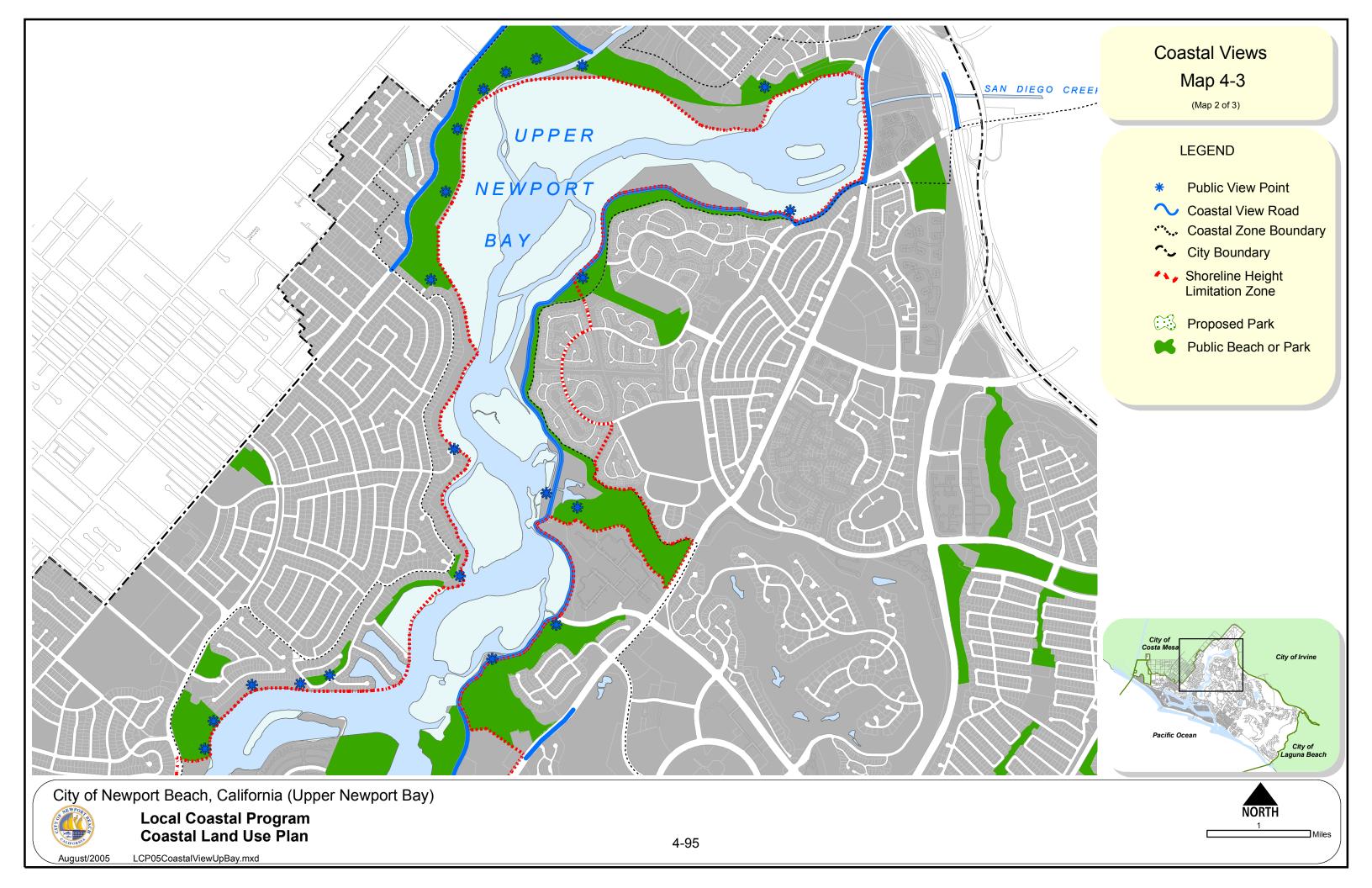
- **4.6-1.** Review all new development subject to California Environmental Quality Act (CEQA) and coastal development permit requirements in accordance with the principles, objectives, and criteria contained in CEQA, the State CEQA Guidelines, the Local Coastal Program, and any environmental review guidelines adopted by the City.
- **4.6-2.** Integrate CEQA procedures into the review procedures for new development within the coastal zone.
- **4.6-3.** Require a qualified City staff member, advisory committee designated by the City, or consultant approved by and under the supervision of the City, to review all environmental review documents submitted as part of an application for new development and provide recommendations to the appropriate decision-making official or body.
- **4.6-4.** Require the City staff member(s) and/or contracted employee(s) responsible for reviewing site specific surveys and analyses to have technical expertise in biological resources, as appropriate for the resource issues of concern (e.g. marine/coastal, wetland/riparian protection and restoration, upland habitats and connectivity) and be knowledgeable about the City of Newport Beach.
- 4.6-5. Where development is proposed within or adjacent to ESHA, wetlands or other sensitive resources, require the City staff member(s) and/or contracted employee(s) to consider the individual and cumulative impacts of the development, define the least environmentally damaging alternative, and recommend modifications or mitigation measures to avoid or minimize impacts. The City may impose a fee on applicants to recover the cost of review of a proposed project when required by this policy.
- 4.6-6. Where development is proposed within or adjacent to ESHA, wetlands or other sensitive resources, require the City staff member(s) and/or contracted employee(s) to include the following in any recommendations of approval: an identification of the preferred project alternative, required modifications, or mitigation measures necessary to ensure conformance with the Coastal Land Use Plan. The decision making body (Planning Director, Planning Commission, or City Council) shall make findings relative to the project's conformance to the recommendations of the City staff member(s) and/or contracted employee(s).
- 4.6-7. Require City staff member(s) and/or contracted employee(s) to make a

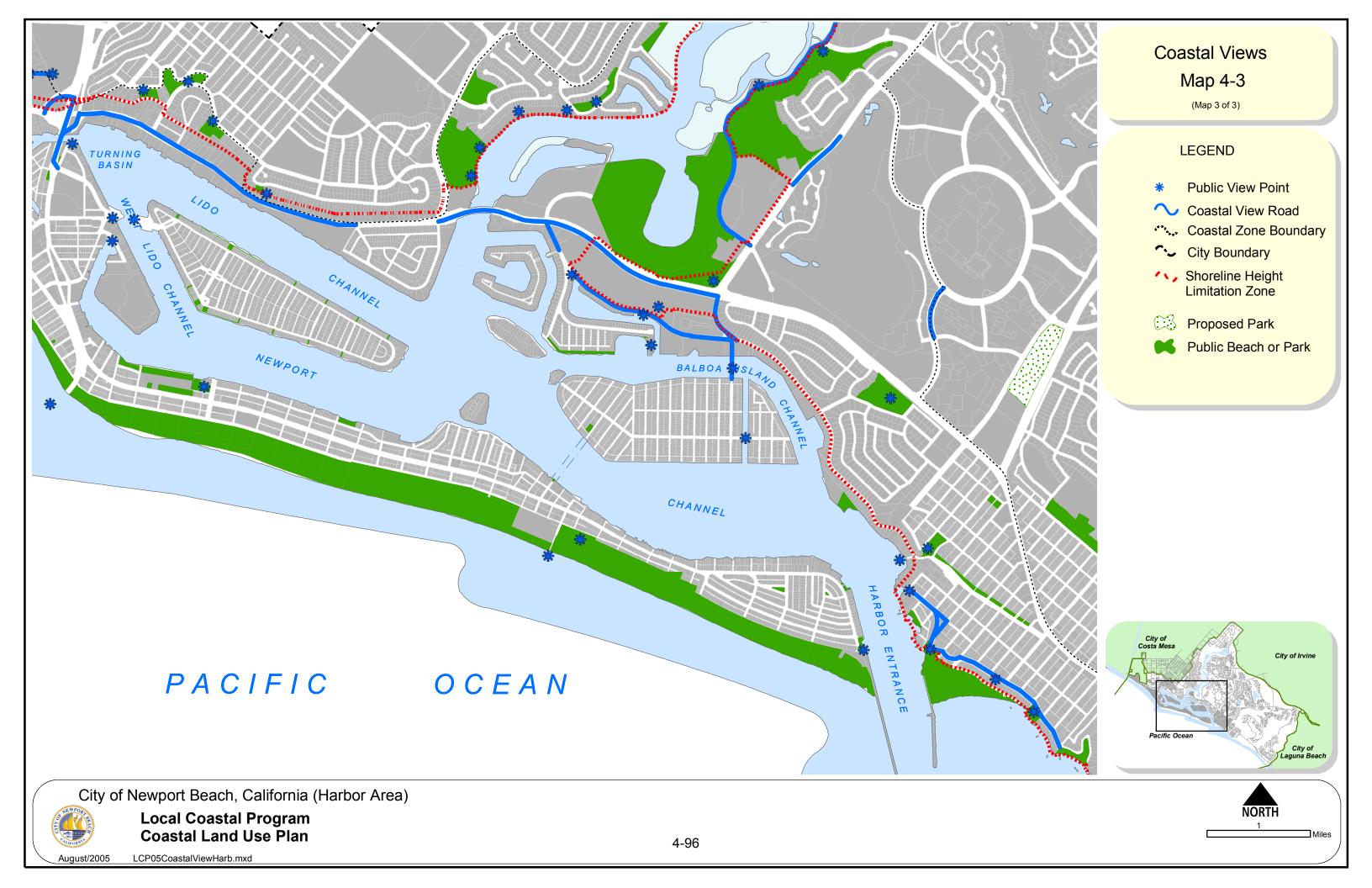
- recommendation to the decision making body as to whether an area constitutes an ESHA, and if recommended as an ESHA, then establish the boundaries thereof and appropriate buffers.
- 4.6-8. Coordinate with the California Department of Fish and Game, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and other resource management agencies, as applicable, in the review of development applications in order to ensure that impacts to ESHA and marine resources, including rare, threatened, or endangered species, are avoided or minimized such that ESHA is not significantly degraded, habitat values are not significantly disrupted, and the biological productivity and quality of coastal waters is preserved.
- 4.6-9. Require applications for new development, where applicable, to include a geologic/soils/geotechnical study that identifies any geologic hazards affecting the proposed project site, any necessary mitigation measures, and contains statements that the project site is suitable for the proposed development and that the development will be safe from geologic hazard for its economic life. For development on coastal bluffs, including bluffs facing Upper Newport Bay, such reports shall include slope stability analyses and estimates of the long-term average bluff retreat rate over the expected life of the development. Reports are to be signed by an appropriately licensed professional and subject to review and approval by qualified city staff member(s) and/or contracted employee(s).

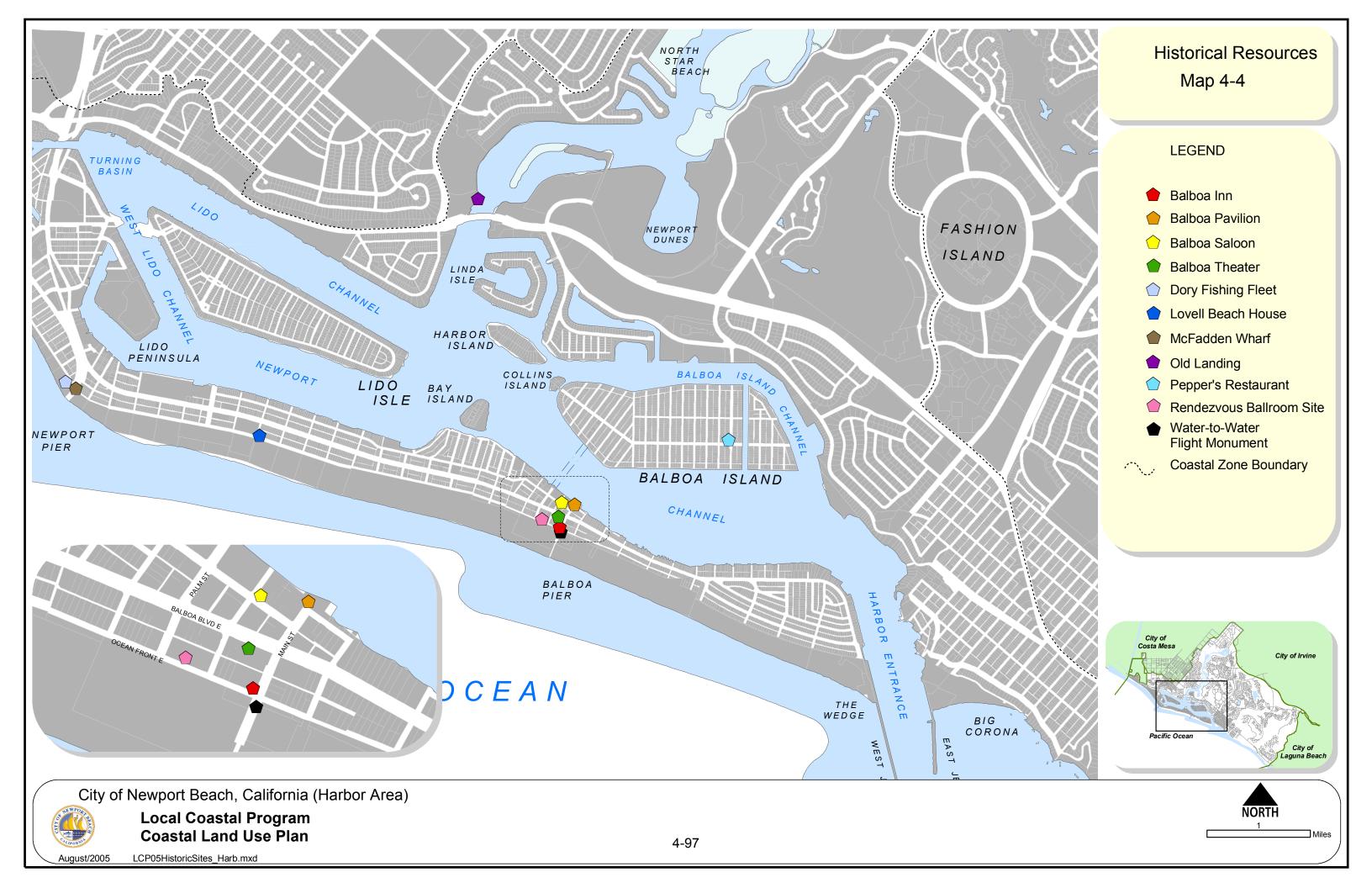












5.0 Glossary

<u>Accrete</u>: To add new material gradually to pre-existing material; opposite of erode.

<u>Accretion</u>: Enlargement of a beach area caused by either natural or artificial means. Natural accretion on a beach is the build-up or deposition of sand or sediments by water or wind. Artificial accretion is a similar build-up due to human activity, such as the accretion due to the construction of a groin or breakwater, or beach fill deposited by mechanical means.

<u>Anaerobic Soil</u>: Soil that is devoid of interstitial oxygen. In wetlands this condition most normally occurs because of the sustained presence of water, which limits contact with the atmosphere.

<u>Anchorage Area</u>: A water area outside of navigation channels designated for the temporary anchorage of vessels, using their own anchoring tackle.

<u>Appealable Area</u>: That portion of the coastal zone within an appealable area boundary adopted pursuant to Section 30603 of the Coastal Act and approved by the Coastal Commission and depicted on the Permit and Appeal Jurisdiction Map.

<u>Appealable Development</u>: After certification of the Newport Beach Local Coastal Program, an action taken by the City of Newport Beach on a coastal development permit application may be appealed to the Coastal Commission for only the following types of developments:

- 1. Developments approved by the City between the sea and the first public road paralleling the sea or within 300 feet of the inland extent of any beach or of the mean high tide line of the sea where there is no beach, whichever is the greater distance.
- Developments approved by the City not included within paragraph (1) that are located on tidelands, submerged lands, public trust lands, within 100 feet of any wetland, estuary, or stream, within 300 feet of the top of the seaward face of any coastal bluff.
- 3. Developments approved by the City not included within paragraph (1) or (2) that are located in a sensitive coastal resource area.
- 4. Any development approved by a coastal county that is not designated as the principal permitted use under the zoning ordinance or zoning district

map approved pursuant to Chapter 6 (commencing with Section 30500 of the Coastal Act).

5. Any development which constitutes a major public works project or a major energy facility.

<u>Aquaculture</u>: A form of agriculture as defined in Section 17 of the Fish and Game Code. Aquaculture products are agricultural products, and aquaculture facilities and land uses shall be treated as agricultural facilities and land uses in all planning and permit-issuing decisions governed by this division.

<u>Aquifer</u>: An underground layer of porous rock, sand, or other earth material containing water, into which wells may be sunk.

<u>Armor</u>: To fortify a topographical feature to protect it from erosion (e.g., constructing a wall to armor the base of a sea cliff).

<u>Armor Rock (armor stone)</u>: Natural or man-made rock or rock-like structures that are used for shoreline protection. Commonly, armor rock is used as the outermost layer of a groin or revetment. Many forms of these rocks are utilized; their overall stability depends largely on the type of mechanical interlock between the units, and in-place fitting.

<u>Artificial Hard Structure</u>: Docks, floats, boat bottoms, bulkheads, seawalls, and other hard surfaces that provide attachment surfaces for marine organisms.

<u>ASBS</u>: Area of Special Biological Significance designation by the California Water Resources Control Board for a coastal habitat that is susceptible to the effects of waste discharge.

<u>Backbeach (Dry Beach)</u>: The sand area inundated only by storm tides or extreme high tides. These areas supply sands to the dune system.

<u>Bathymetry</u>: Related to submarine contours or topography; also refers to depth measurements.

<u>Beach</u>: The expanse of sand, gravel, cobble or other loose material that extends landward from the low water line to the place where there is distinguishable change in physiographic form, or to the line of permanent vegetation. The seaward limit of a beach (unless specified otherwise) is the mean low water line.

<u>Beach Nourishment Program</u>: Plan for conducting a series of beach nourishment projects at a specific location, typically over a period of 50 years. The program would be based on establishing the technical and financial feasibility of beach nourishment

for the site and would include plans for obtaining funding and sources of sand for its duration.

<u>Beach Nourishment Project</u>: Placement of sand on a beach to form a designed structure in which an appropriate level of protection from storms is provided and an additional amount of sand (advanced fill) is installed to provide for erosion of the shore prior to the anticipated initiation of a subsequent project. The project may include dunes and/or hard structures as part of the design.

<u>Bedrock</u>: Solid rock underlying soil and younger rock layers; generally the oldest exposed geological unit.

<u>Berm</u>: A nearly horizontal portion of the beach or backshore formed by the deposit of material by wave action. Some beaches have no berms and others may have one or several.

<u>Berth</u>: A generic term defining any location, such as a floating dock, slip, mooring and the related water area (berthing area) adjacent to or around it, intended for the storage of a vessel in water.

<u>Biodiversity</u>: A term used to quantitatively or qualitatively describe the species richness and abundance of plants and animals within an ecosystem.

<u>Biological Community</u>: A naturally occurring group of different plant and animals species that live in a particular environment.

<u>Bluff</u>: A high bank or bold headland with a broad, precipitous, sometimes rounded cliff face overlooking a plain or body of water. A bluff may consist of a steep cliff face below and a more sloping upper bluff above.

<u>Bluff, Coastal</u>: A bluff overlooking a beach or shoreline or that is subject to marine erosion. Many coastal bluffs consist of a gently sloping upper bluff and a steeper lower bluff or sea cliff. The term "coastal bluff" refers to the entire slope between a marine terrace or upland area and the sea. The term "sea cliff" refers to the lower, near vertical portion of a coastal bluff. For purposes of establishing jurisdictional and permit boundaries coastal bluffs include, (1) those bluffs, the toe of which is now or was historically (generally within the last 200 years) subject to marine erosion; and (2) those bluffs, the toe of which is not now or was not historically subject to marine erosion, but the toe of which lies within an area otherwise identified as an Appealable Area.

<u>Bluff Edge</u>: The upper termination of a bluff, cliff, or seacliff: In cases where the top edge of the bluff is rounded away from the face of the bluff as a result of erosional processes related to the presence of the steep bluff face, the bluff line or edge shall

be defined as that point nearest the bluff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the bluff In a case where there is a steplike feature at the top of the bluff face, the landward edge of the topmost riser shall be taken to be the bluff edge. Bluff edges typically retreat landward due to coastal erosion, landslides, development of gullies, or by grading (cut). In areas where the bluff top or bluff face has been cut or notched by grading, the bluff edge shall be the landwardmost position of either the current of historic bluff edge. In areas where fill has been placed near or over the historic bluff edge, the original natural bluff edge, even if buried beneath fill, shall be taken to be the bluff edge.

Bluff Face: The portion of a bluff between the bluff edge and the toe of the bluff.

<u>Bluff Top Retreat (or cliff top retreat)</u>: The landward migration of the bluff or cliff edge, caused by marine erosion of the bluff or cliff toe and subaerial erosion of the bluff or cliff face.

BMPs (Best Management Practices): Schedules of activities, prohibitions of practices, operation and maintenance procedures, and other management practices to prevent or reduce the conveyance of pollution in stormwater and urban runoff, as well as, treatment requirements and structural treatment devices designed to do the same.

<u>Buffer</u>: A buffer is a development setback that provides essential open space between development and protected habitat. Buffers keep disturbance at a distance, accommodate errors in the estimation of habitat boundaries, and provide important auxiliary habitat that may be used, for example, for foraging, maintenance of pollinators, or refuge from high tides. Buffers should be measured from the delineated boundary of an ESHA or wetland or, for streams, from the top of bank or the landward edge of riparian vegetation, which ever provides the larger buffer.

<u>Breach</u>: A breakthrough of part, or all, of a protective wall, beach sand barrier, beach berm, or the like by ocean waves, river or stream flow, mechanical equipment, or a combination of these forces. Breaching is sometimes purposefully done to protect a region from river overflow.

<u>Breakwater</u>: A structure or barrier protecting a shore area, harbor, anchorage, or basin from waves, usually constructed as a concrete or riprap (rock wall) structure.

<u>Bulkhead</u>: Vertical walls built into and along the Harbor shoreline preventing the erosion of land into the water and to protect the land from wave, tide and current action by the water, similar to a "retaining wall" on land. Bulkheads may be directly bordered by water, or may have sloped stones (riprap) or sand beach between the bulkhead and the water and land areas.

<u>Bulkhead Line</u>: Harbor land/water perimeter lines established in Newport Harbor by the federal government, which define the permitted limit of filling or solid structures that may be constructed in the Harbor.

<u>California Least Tern</u>: An endangered bird species that nests on beaches and in salt marshes along California; smallest of the terns.

<u>Canyon Edge</u>: The upper termination of a canyon: In cases where the top edge of the canyon is rounded away from the face of the canyon as a result of erosional processes related to the presence of the canyon face, the canyon edge shall be defined as that point nearest the canyon beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the canyon. In a case where there is a steplike feature at the top of the canyon face, the landward edge of the topmost riser shall be taken to be the canyon edge.

<u>Caulerpa algae</u>: An invasive Mediterranean seaweed introduced to southern California in 2000 that has a potential to cause severe ecological damage to coastal and nearshore waters.

<u>CDFG</u>: California Department of Fish and Game (also known as DFG).

CNDDB: California Natural Diversity Database.

<u>Channel</u>: A water area in Newport Harbor designated for vessel navigation, with necessary width and depth requirements, and which may be marked or otherwise designated on federal navigation charts, as well as in other sources.

<u>Charter Vessel</u>: A vessel used principally for charter purposes, a "charter" being a rental agreement, generally for a period of one day or more.

<u>Clast</u>: An individual constituent, grain, or fragment of a sediment or rock, produced by the mechanical weathering (disintegration) of a larger rock mass.

<u>Cliff</u>: A high, very steep to perpendicular or overhanging face of rock.

<u>Coastal Access</u>: The ability of the public to reach, use or view the shoreline of coastal waters or inland coastal recreation areas and trails.

<u>Coastal-dependent Development or Use</u>: Any development or use which requires a site on, or adjacent to, the sea to be able to function at all.

<u>Coastal Development Permit (CDP)</u>: A permit for any development within the coastal zone that is required pursuant to subdivision (a) of Section 30600.

<u>Coastal Commission</u>: The California Coastal Commission, the state agency established by state law responsible for carrying out the provisions of the Coastal Act and for review of coastal permits on appeal from local agencies.

<u>Coastal Plan</u>: The California Coastal Zone Conservation Plan prepared and adopted by the California Coastal Zone Conservation Commission and submitted to the Governor and the Legislature on December 1, 1975, pursuant to the California Coastal Zone Conservation Act of 1972 (commencing with Section 27000).

<u>Coastal-related Development</u>: Any use that is dependent on a coastal-dependent development or use.

Coastal Zone: That land and water area of the State of California from the Oregon border to the border of the Republic of Mexico, specified on the maps identified and set forth in Section 17 of that chapter of the Statutes of the 1975-76 Regular Session enacting this division, extending seaward to the state's outer limit of jurisdiction, including all offshore islands, and extending inland generally 1,000 yards from the mean high tide line of the sea. In significant coastal estuarine, habitat, and recreational areas it extends inland to the first major ridgeline paralleling the sea or five miles from the mean high tide line of the sea, whichever is less, and in developed urban areas the zone generally extends inland less than 1,000 yards. The coastal zone does not include the area of jurisdiction of the San Francisco Bay Conservation and Development Commission, established pursuant to Title 7.2 (commencing with Section 66600) of the Government Code, nor any area contiguous thereto, including any river, stream, tributary, creek, or flood control or drainage channel flowing into such area.

<u>Contour</u>: A line on a topographic map or bathymetric (depth) chart representing points of equal elevation with relation to a datum (point or set of points). Contour lines are usually spaced into intervals for easier comprehension and utilization.

<u>Cretaceous</u>: A period of geologic time spanning 136-64 million years ago.

<u>Cumulative Effect (Cumulative Impacts)</u>: The incremental effects of an individual project shall be reviewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

<u>Current</u>: A flow of water in a particular direction. Such flows can be driven by wind, temperature or density differences, tidal forces, and wave energy. Currents are often classified by location, such as longshore current, surface current, or deep ocean currents. Different currents can occur in the same general area, resulting in different water flows, for example, a rip current can flow perpendicular to the shore through

the surf zone, a long shore current may flow southerly, parallel to the coast and a seasonal deep water current may flow to the north.

<u>Demolition</u>: The deliberate removal or destruction of the frame or foundation of any portion of a building or structure for the purpose of preparing the site for new construction or other use.

<u>Development</u>: On land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511).

<u>Disturbed</u>: A term used to identify a biological habitat that has been altered by natural or man-made events.

<u>Dock</u>: A structure generally linked to the shoreline, to which a vessel may be secured. A dock may be fixed to the shore, on pilings, or floating in the water.

<u>Dominant</u>: The major plant or animal species in a community.

<u>Downcoast</u>: In the United States usage, it is the coastal direction generally trending toward the south; also the way in which current flows.

DPR: California State Department of Parks and Recreation.

<u>Dry Storage</u>: Dry storage of vessels includes all on-land storage of vessels including vessels normally stored in open or enclosed rack structures, on trailers, on cradles, on boat stands, or by other means.

<u>Dune</u>: Ridges or mounds of loose, wind-blown material usually sand. A dune structure often has a back and foredune area. Stable dunes are often colonized by vegetation.

<u>DWR</u>: California State Department of Water Resources.

<u>Easement</u>: A limited right to make use of a land owned by another, for example, a right of way across the property.

<u>Ebb Tide</u>: The period of tide between high water and the succeeding low water; a falling tide (opposite = flood tide).

<u>Eelgrass</u>: A marine flowering plant (*Zostera marina*) that is found primarily in coastal bays and estuaries on soft substrate.

<u>El Niño</u>: A term used to describe a cyclic weather pattern caused by changes in tropical ocean current patterns that result in worldwide changes in weather patterns.

<u>Energy Facility</u>: Any public or private processing, producing, generating, storing, transmitting, or recovering facility for electricity, natural gas, petroleum, coal, or other source of energy.

<u>Entertainment/Excursion Vessels</u>: Commercial vessels engaged in the carrying of passengers for hire for hire for the purposes of fishing, whale watching, diving, educational activities, harbor and coastal tours, dining/drinking, business or social special events and entertainment.

<u>Eocene</u>: A period of geologic time spanning 54-38 million years ago.

<u>Ephemeral</u>: Short-lived (e.g, an ephemeral stream only flows immediately after rainfall).

<u>Equilibrium Beach Width</u>: The mean distance between the shoreline and backbeach line at which sand contributions and losses are balanced.

<u>Erode</u>: The gradual wearing away and removal of land surface by various agents such as waves; opposite of accrete.

<u>Erosion</u>: The wearing away of land by natural forces. On a beach, the carrying away of beach material by wave action, currents or the wind.

ESA (Environmental Study Area): Relatively large, undeveloped areas containing natural habitats and may be capable of supporting sensitive biological resources.

ESHA (Environmentally Sensitive Habitat Area): Any area in which plant or animal life or their habitat are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and development (PRC 30107.5).

<u>Estuarine System</u>: Deepwater tidal habitats and adjacent tidal wetlands that are usually semi-enclosed by land but have open, partly obstructed, or sporadic access to the ocean, with ocean water at least occasionally diluted by freshwater runoff from the land. The upstream and landward limit is where ocean-derived salts measure less than 0.5 parts per thousand during the period of average annual low flow.

<u>Estuary</u>: The region near a river mouth in which the fresh water of the river mixes with the salt water of the sea.

<u>Evaluation</u>: Process by which a project's performance is determined relative to criteria developed for this purpose.

Exclusion Area: That portion of the coastal zone within an exclusion area boundary adopted pursuant to the Coastal Act and approved by the Coastal Commission after the effective date of the delegation of development review authority and depicted on the certified Permit and Appeal Jurisdiction Map. Development within this area is excluded from coastal development permit requirements if certain criteria identified in the adopted exclusion are met.

<u>Exclusion Areas Map</u>: A map depicting those areas where specified development types are excluded from the coastal development permit requirements.

<u>Fault</u>: A rock fracture accompanied by displacement.

<u>Feasible</u>: Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

<u>Federal Coastal Act</u>: The Federal Coastal Zone Management Act of 1972 (16 U.S.C. 1451, et seq.), as amended.

<u>Fen</u>: A unique type of wetland characterized by a saturated substrate dominated by organic material in which acidic conditions (pH < 7) prevail. Contrast with a bog, which has a saturated substrate dominated by organic material in which basic conditions (pH > 7) prevail.

<u>Fill</u>: Earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area.

<u>First Public Road Paralleling the Sea</u>: The road nearest the sea, as defined in this Section, and which meets all of the following criteria:

1. The road is lawfully open and suitable for uninterrupted use by the public;

- 2. The road is maintained by a public agency;
- 3. The road contains an improved all-weather surface open to motor vehicle traffic in at least one direction;
- 4. The road is not subject to any restrictions on use by the public except during an emergency or for military purposes; and
- 5. The road connects with other public roads providing a continuous access system and generally parallels and follows the shoreline of the sea so as to include all portions of the sea where the physical features such as bays, lagoons, estuaries and wetlands cause the waters of the sea to extend landward of the generally continuous coastline.

Forebeach (Wet Beach): The sand area affected regularly by tides and wave action.

<u>Foreshore (or Beach Face)</u>: Region of the coast extending from the berm crest (or the highest point of wave wash at high tide) to the low-water mark that is measured at low tide.

<u>Formation</u>: A unit of rock that is distinctive and persistent over a large area.

Fossiliferous: Rock units containing fossils.

Geohazard: A risk associated with geologic processes or events.

<u>Giant Kelp</u>: A large brown seaweed (*Macrocystis pyrifera*) that grows primarily on rocky substrate and forms a underwater "forest" in which a diverse group of algae, invertebrates, and fishes are found.

<u>GIS (Geographic Information System)</u>: A GIS is a computer system capable of assembling, storing, manipulating, and displaying geographically referenced information. A GIS allows analysis of spatial relationships between many different types of features based on their location in the landscape.

Global Positioning System (GPS): A satellite-based navigational system.

<u>Gravity Walls</u>: Massive, self-supporting walls which resist horizontal wave forces through their sheer mass.

Grid: City of Newport 2000' X 3000' aerial reference grid.

<u>Groin</u>: A shoreline protection structure built, usually perpendicular to the shoreline, to trap nearshore sediment or retard erosion of the shore. A series of groins acting together to protect a section of beach is known as a groin system or groin field.

<u>Groundwater</u>: Subsurface water occupying the zone of saturation usually found in porous rock strata and soils.

<u>Habitat</u>: The locality, including the physical and biological environment, in which a plant or animal lives.

<u>Hardscape Habitat</u>: Hard surfaces of pilings, docks, floats, wharves, seawalls, bulkheads, jetties, and rock groins, and natural intertidal and subtidal reefs that are colonized by marine organisms

<u>Harbor Lines</u>: All established Bulkhead, Pierhead, and Project Lines as defined within Newport Harbor by the federal, state, county and city governments.

Harbor Maintenance Uses, Equipment, and Facilities: All uses, and their related equipment, vessels, docking and land storage facilities and access which provide: dredging and beach replenishment; demolition, repair and new construction of docks, piers, bulkheads and other in-and-over-water structures; mooring maintenance and repair; waterborne debris and pollution control, collection and removal. This category also includes environmental, survey or scientific vessels and related equipment based, or on assignment, in Newport Harbor: All vessels under this definition may also be referred to as "work boats."

Harbor Permit Policies: City of Newport Beach City Council Policy Manual Section H-1, governing permits for structures bayward of the bulkhead line, and related parking, sanitary, utility and related support requirements

<u>Harbor Regulations</u>: Title 17 of the Newport Beach Municipal Code governing structures, uses and activities within the Harbor.

<u>Headland (Head)</u>: A high, steep-faced projection extending into the sea, usually marking an area of fairly stable and rigid landform.

Historic Building or Structure: See Historic Resource.

<u>Historic District</u>: A geographic area which contains a concentration of historic buildings, structures, or sites united historically, culturally, or architecturally.

<u>Historic Resource</u>: Any object, building, structure, site, area, place, record, or manuscript which is historically or archeologically significant, or which is significant in the architectural, engineering, scientific, economic, agriculture, educational, social,

political, military, or cultural history of the City of Newport Beach and/or California and/or the United States.

<u>Holocene</u>: In geologic time, less than 11,000 years ago; also called Recent.

<u>Hydric Soil</u>: A type of soil with characteristics resulting from prolonged saturation and chemically reducing conditions such as occurs under anaerobic conditions.

<u>Hydrology</u>: The dynamic processes of the water within an environment including the sources, timing, amount, and direction of water movement.

<u>Hydrophytic Vegetation</u>: Plants that have adapted to living in aquatic environments. These plants are also called hydrophytes. In wetlands, hydrophytic species occur where at least the root zone of the plant is seasonally or continually found in saturated or submerged soil.

<u>Implementing Actions</u>: The ordinances, regulations, or programs which implement either the provisions of the certified local coastal program or the policies of Chapter 3 of the Coastal Act which are submitted pursuant to Section 30502.

<u>In Situ</u>: A Latin phrase meaning "in place." Archaeologically it refers to an artifact or object being found in its original, undisturbed position.

<u>Intertidal</u>: Located between the low and high tide tidal extremes.

<u>Invertebrates</u>: Animals without backbones.

<u>Jetty</u>: On open seacoasts, a structure extending away from the shore, which is designed to prevent shoaling of a channel and to direct and confine the stream or tidal flow. Jetties are built at the mouths of rivers, harbors, or tidal inlets to help deepen and stabilize the access channel.

<u>Lacustrine System</u>: Wetlands and deepwater habitats (1) situated in a topographic depression or dammed river channel; (2) lacking trees, shrubs, persistent emergents, emergent mosses, or lichens with greater than 30% areal coverage; and (3) whose total area exceeds 8 hectares (20 acres); or area less than 8 hectares if the boundary is active wave-formed or bedrock or if water depth in the deepest part of the basin exceeds 2 meters (6.6 ft) at low water. Ocean-derived salinities are always less than 0.5 parts per thousand.

<u>Lagoon</u>: A shallow body of water, such as a pond or lake, usually located near or connected to the sea.

<u>Land Use Plan</u>: The relevant portions of a local government's general plan, or local coastal element which are sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies and, where necessary, a listing of implementing actions.

<u>Launching Facility</u>: A generic term referring to any location, structures (ramps, docks) and equipment (cranes, lifts, hoists, etc.) where vessels may be placed into, and retrieved from the Harbor waters.

LCP: See Local Coastal Program.

Leeward: The direction toward which the wind is blowing.

Limited Use Overnight Visitor Accommodations — Any hotel, motel, or other similar facility that provides overnight visitor accommodations wherein some or all of the units, rooms, lots or parcels or other segment of the facility may be sold to a subsequent purchaser who receives the right in perpetuity, for life, or a term of years, to the recurrent, exclusive use or occupancy of a lot, parcel, unit, room(s), or segment of the facility, annually or on some other seasonal or periodic basis, for a period of time that has been or will be allotted from the use or occupancy periods into which the facility has been divided and shall include, but not be limited to timeshare, condominium-hotel, fractional ownership hotel, or uses of a similar nature, as those terms shall be defined in the implementing regulations for this land use plan (when such regulations are certified).

<u>Liquefaction</u>: The process of becoming liquid, especially applied to sand that loses its bearing strength due to strong shaking.

<u>Littoral</u>: Of or pertaining to a shore, especially of the sea.

<u>Littoral Cell</u>: A region that encompasses most features affecting sediment transport. The boundaries of the cell are usually delineated by river drainage areas, promontory headlands, or submarine canyons on the periphery, the continental shelf-continental slope boundary on the seaward side and by inland ridges and river inlets on the landward side. Sediment within these cells generally travel seaward by river drainage, southward (downcoast) by longshore currents, and are eventually lost to the continental slope area or submarine canyon.

<u>Littoral Drift</u>: The sedimentary material moved in the littoral zone under the influence of waves and currents; consisting of silt, sand, gravel, cobbles, and other beach material.

<u>Littoral Transport</u>: The movement of sediment in the littoral zone by waves, currents, and tides. This includes movement parallel (longshore transport) and perpendicular (on-offshore transport) to the shore.

<u>Littoral Zone</u>: The region where waves, currents, and winds interact with the land and its sediments. This region comprises a backshore, foreshore, inshore, and offshore and is broken down into littoral cells.

<u>Live-aboard</u>: Any person who uses a vessel as a domicile as that term is defined in Section 200 of the Elections Code of the State of California, including permanently or on a temporary basis for a period exceeding 3 days.

<u>Local Coastal Program</u>: A local government's (a) land use plans, (b) zoning ordinances, (c) zoning district maps, and (d) within sensitive coastal resources areas, other implementing actions, which, when taken together, meet the requirements of, and implement the provisions and policies of, the Coastal Act at the local level.

<u>Local Government</u>: Any chartered or general law city, chartered or general law county, or any city and county.

<u>Longshore</u>: Parallel to and near the shoreline.

<u>Longshore Current</u>: A flow of water in the breaker zone, moving essentially parallel to the shore, usually generated by waves breaking at an angle to the shoreline.

<u>LUP (Land Use Plan)</u>: Land use plan means the relevant portion of a local government's general plan, or local coastal element which are sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies and, where necessary, a listing of implementing actions.

<u>Marina</u>: A berthing facility (other than moorings or anchorage) in which five or more vessels are wet-stored (in water) and/ or dry-stored (on land/racks or on floating docks).

<u>Marine Conservation Area</u>: A "state marine conservation area," is a non-terrestrial marine or estuarine area that is designated so the managing agency may achieve one or more of the following:

- 1. protect or restore rare, threatened or endangered native plants, animals or habitats in marine areas;
- 2. protect or restore outstanding, representative or imperiled marine species, communities, habitats and ecosystems;

- 3. protect or restore diverse marine gene pools;
- contribute to the understanding and management of marine resources and ecosystems by providing the opportunity for scientific research in outstanding, representative or imperiled marine habitats or ecosystems;
- 5. preserve outstanding or unique geological features; or
- 6. provide for sustainable living marine resource harvest.

<u>Marine Park</u>: A "state marine park," is a non-terrestrial marine or estuarine area that is designated so the managing agency may provide opportunities for spiritual, scientific, educational, and recreational opportunities, as well as one or more of the following:

- 1. protect or restore outstanding, representative or imperiled marine species, communities, habitats and ecosystems;
- contribute to the understanding and management of marine resources and ecosystems by providing the opportunity for scientific research in outstanding, representative or imperiled marine habitats or ecosystems;
- 3. preserve cultural objects of historical, archaeological and scientific interest in marine areas; or
- 4. preserve outstanding or unique geological features.

<u>Marine Reserve</u>: A "state marine reserve," is a non-terrestrial marine or estuarine area that is designated so the managing agency may achieve one or more of the following:

- 1. protect or restore rare, threatened or endangered native plants, animals or habitats in marine areas:
- 2. protect or restore outstanding, representative or imperiled marine species, communities, habitats and ecosystems;
- 3. protect or restore diverse marine gene pools; or
- contribute to the understanding and management of marine resources and ecosystems by providing the opportunity for scientific research in outstanding, representative or imperiled marine habitats or ecosystems.

<u>Marine System</u>: Open ocean overlying the continental shelf and coastline exposed to waves and currents of the open ocean shoreward to (1) extreme high water of spring tides; (2) seaward limit of wetland emergents, trees, or shrubs; or (3) the seaward limit of the Estuarine System, other than vegetation. Salinities exceed 30 parts per thousand.

<u>Marine Terrace</u>: A flat or gentle seaward sloping wave-cut bench, which is a remnant of an old coastline. Marine terraces are conspicuous along most of the California coast where uplift has occurred.

<u>Market Value</u>: For purposes of determining "substantial improvement", the replacement cost as determined by its replacement value according to the valuation figures established by the City of Newport Beach.

<u>Mean High Water</u>: The 19-year average of all high water heights (if the tide is either semidiurnal or mixed) or the higher high water heights if the tide is diurnal. For diurnal tides high water and higher high water are the same.

Mean Higher High Water: The 19-year average of only the higher high water heights.

<u>Mean Low Water</u>: The 19-year average of all low water heights (if the tide is either semidiurnal or mixed) or the lower low water heights if the tide is diurnal. For diurnal tides low water and lower low water are the same.

Mean Lower Low Water: The 19-year average of only the lower low water heights.

<u>Mean Sea Level</u>: The 19-year average height of the surface of the sea for all stages of the tide, usually determined from hourly height readings (see NGVD of 1929).

<u>Mesa</u>: An isolated, relatively flat geographical feature, often demarcated by canyons (from Spanish mesa, table).

Miocene: A period of geologic time spanning 27-26 million years ago.

<u>Mitigation</u>: As defined in Section 15370 of the State Guidelines for Implementation of the California Environmental Quality Act, mitigation includes:

- 1. Avoiding the impact altogether by not taking a certain action or parts of an action.
- 2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

- 3. Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
- 4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- 5. Compensating for the impact by replacing or providing substitute resources or environments.

<u>Mitigation Measures</u>: Measures imposed on a project consistent with Section 15370 of the State Guidelines for Implementation of the California Environmental Quality Act to avoid, minimize, eliminate, or compensate for adverse impacts to the environment.

<u>Monitoring</u>: The systematic collection of physical, biological, or economic data or a combination of these data in order to make decisions regarding project operation or to evaluate project performance. Monitoring is typically required for beach nourishment projects and habitat restoration projects.

<u>Mooring</u>: A device consisting of a floating ball, can or other object that is secured permanently to the Harbor bottom by an anchor system for purposes of securing a vessel.

Mooring Area: An area designated for a group of moorings.

MPA (Marine Protected Area): A named discrete geographic area that has been designated by law, administrative action, or voter initiative to protect or conserve marine life and habitat.

MS4: Municipal Separate Storm Sewer Systems.

<u>National Geodetic Vertical Datum of 1929 (NGVD)</u>: A fixed reference for elevations, equivalent to the 1929 Mean Sea Level Datum. The geodetic datum is fixed and does not take into account the changing stands of sea level. NGVD should not be confused with mean sea level (see Mean Sea Level).

<u>Nearshore Zone</u>: An indefinite zone extending seaward from the shoreline well beyond the breaker zone; it defines the area of nearshore currents.

<u>Newport Bay</u>: The terms "Newport Bay" and "Newport Harbor" are often used interchangeably. However, Newport Bay is an estuary consisting of the Lower Newport Bay (south of Pacific Coast Highway) and the Upper Newport Bay (north of Pacific Coast Highway). Newport Harbor generally refers to all the water area within

Lower Newport Bay and within the Upper Newport Bay, exclusive of the Upper Newport Bay Marine Park.

NMFS: National Marine Fisheries Service.

<u>Non-conforming Structure</u>: A structure that was lawfully erected, but which does not conform with the property development regulations prescribed in the regulations for the district in which the structure is located by reason of adoption or amendment of this code or by reason of annexation of territory to the City.

Non-conforming Use: A use of a structure or land that was lawfully established and maintained, but which does not conform with the use regulations or required conditions for the district in which it is located by reason of adoption or amendment of this code or by reason of annexation of territory to the City.

<u>Nourishment</u>: The process of replenishing or enlarging a beach. It may be brought about naturally by longshore transport or artificially by the deposition of dredged materials.

NPDES: National Pollutant Discharge Elimination System.

NPS: National Park Service.

<u>Open Coastal Waters</u>: The area composed of submerged lands at extreme low-water of spring tide extending seaward to the boundaries of the Exclusive Economic Zone (12-200 miles). This includes navigation channels, turning basins, vessel berthing, anchorage, and mooring areas of Newport Bay.

NPS: Nonpoint source pollution or polluted runoff.

Offshore: Off or away from the shore. This area extends from beyond the breaker zone to the outer limit of the littoral zone and beyond.

Onshore (Inshore): The region between the seaward edge of the foreshore and the seaward edge of the breakers or waves.

OTD (Offer to Dedicate): An OTD is a document, recorded against the title to a property, which is an offer of dedication to the people of the State of California of an easement over the property or a portion of the property. Generally, an OTD allows for specific uses in of the area of the property involved (for example, allowing the public to walk across the area). The offer conveys an easement in perpetuity only upon its acceptance on behalf of the people by a public agency or by a nonprofit private entity approved by the executive director of the Coastal Commission.

<u>Palustrine System</u>: All non-tidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and all such tidal wetlands where ocean-derived salinities are below 0.5 parts per thousand. This category also includes wetlands lacking such vegetation but with all of the following characteristics: (1) area less than 8 hectares (20 acres); (2) lacking an active wave-formed or bedrock boundary; (3) water depth in the deepest part of the basin less than 2 meters (6.6 ft) at low water; and (4) ocean-derived salinities less than 0.5 parts per thousand.

<u>Permit</u>: Any license, certificate, approval, or other entitlement for use granted or denied by any public agency.

<u>Permit and Appeal Jurisdiction Map</u>: A map depicting those areas where the Coastal Commission retains permit and appeal jurisdiction.

<u>Person</u>: Any individual, organization, partnership, limited liability company, or other business association or corporation, including any utility, and any federal, state, local government, or special district or an agency thereof.

<u>Pile</u>: A long, heavy timber or section of concrete or metal driven or drilled into the earth or seabed to serve as a support or protection.

<u>Pier</u>: A fixed structure extending from the shore into a body of water.

<u>Pier, Private</u>: A pier used for private recreational purposes by the owner(s) or occupant(s) of the abutting upland property without payment of a separate rental or lease fee, except for permit fees to City.

<u>Pier, Public</u>: A pier used for public recreational purposes provided by a public agency.

<u>Pierhead Line</u>: Harbor water area perimeter lines established in Newport Harbor by the federal government that define the permitted limit of fixed pier, floating dock and other in-water structures which may be constructed in the Harbor.

<u>Pleistocene</u>: A period of geologic time spanning 2 million - 11,000 years ago.

<u>Pliocene</u>: A period of geologic time spanning 7-2 million years ago.

<u>Pocket Beach</u>: A small beach formed between two points or headlands, often at the mouth of a coastal stream. Pocket beaches are common throughout the California coastline.

<u>Predominant Line of Development</u>: The most common or representative distance from a specified group of structures to a specified point or line (e.g. topographic line

or geographic feature). For example, the predominant line of development for a block of homes on a coastal bluff (a specified group of structures) could be determined by calculating the median distance (a representative distance) these structures are from the bluff edge (a specified line).

<u>Project Lines</u>: Harbor water area channel lines of the improvements constructed by the federal government in 1935-1936, and as shown on navigation charts of Newport Harbor. Also referred to as the "Federal Channel." (see Newport Beach City Design Criteria and Standard Drawings for Harbor Construction).

<u>Public Trust Lands</u>: Public Trust lands shall be defined as all lands subject to the Common Law Public Trust for commerce, navigation, fisheries, recreation, and other public purposes. Public Trust Lands include tidelands, submerged lands, the beds of navigable lakes and rivers, and historic tidelands and submerged lands that are presently filled or reclaimed and which were subject to the Public Trust at any time (from California Code of Regulations, Section 13577; see tidelands and submerged lands).

Public works:

- 1. All production, storage, transmission, and recovery facilities for water, sewerage, telephone, and other similar utilities owned or operated by any public agency or by any utility subject to the jurisdiction of the Public Utilities Commission, except for energy facilities.
- All public transportation facilities, including streets, roads, highways, public parking lots and structures, ports, harbors, airports, railroads, and mass transit facilities and stations, bridges, trolley wires, and other related facilities. For purposes of this division, neither the Ports of Hueneme, Long Beach, Los Angeles, nor San Diego Unified Port District nor any of the developments within these ports shall be considered public works.
- 3. All publicly financed recreational facilities, all projects of the State Coastal Conservancy, and any development by a special district.
- 4. All community college facilities.

<u>Quaternary</u>: A period of geologic time comprising the past 2 million years; includes the Pleistocene and Holocene ages.

<u>Qualified Biologist</u>: A person who has earned a minimum of a Bachelor of Science degree in biology or a related field from an accredited college or university and has demonstrated field experience evaluating land use impacts on marine or wildlife species and their habitats. Biologists who conduct wetland delineations shall have

completed the U.S. Army Corps of Engineers' "Reg IV" wetland delineation training, or the equivalent, and shall have the demonstrated ability to independently conduct wetland delineations.

<u>Riparian</u>: Consists of trees, shrubs, or herbs that occur along watercourses or water bodies. The vegetation is adapted to flooding and soil saturation during at least a portion of its growing season.

<u>Reflection</u>: Redirection of a wave when it impinges on a steep beach, cliff or other barrier:

Retaining Wall: A wall used to support or retain an earth embankment or area of fill.

<u>Revetment</u>: A sloped retaining wall; a facing of stone, concrete, blocks, rip-rap, etc. built to protect an embankment, bluff, or development against erosion by wave action and currents.

Rill: The channel of a small stream or gully.

Rip Current: A strong surface current flowing seaward from the shore. It usually appears as a visible band of agitated water and is the return movement of water piled up on the shore by incoming waves and wind. With the seaward movement concentrated in a limited band its velocity is accentuated. Rip currents can pull inexperienced swimmers and waders into deeper water away from the shore. Since a rip current is usually quite narrow, the most effective way to get out of it is to swim perpendicular to the direction of the flow (in most cases, parallel to the beach). Rip currents can often develop adjacent to a jetty or groin.

<u>Riprap</u>: A protective layer or facing of rock, concrete blocks or quarrystone, placed to prevent erosion, scour, or sloughing of an embankment or bluff.

<u>Riverine System</u>: All wetlands and deepwater habitats contained within a channel except those wetlands (1) dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) which have habitats with ocean-derived salinities in excess of 0.5 parts per thousand.

<u>RWQCB</u>: State of California Regional Water Quality Control Board.

<u>Sand Source</u>: Resource of sand that can be economically used for beach nourishment. The sand must meet the requirements for size distribution and cleanliness and its removal and transfer must not create unacceptable environmental effects. The source may be on land, offshore, in a nearby inlet, or in a navigational channel, a shoal, or other area in which sand accumulates.

<u>Sandstone</u>: A rock composed predominantly of sand grains that have undergone cementation.

<u>Santa Ana Regional Water Quality Control Board</u>: California Regional Water Quality Control Board, Santa Ana Region.

<u>Scarp (Beach Scarp)</u>: An almost vertical slope along the beach caused by wave erosion. It may vary in height from a few inches to several feet or more, depending on wave action and the nature and composition of the beach.

<u>Sea</u>: The Pacific Ocean and all harbors, bays, channels, estuaries, salt marshes, sloughs, and other areas subject to tidal action through any connection with the Pacific Ocean, excluding nonestuarine rivers, streams, tributaries, creeks, and flood control and drainage channels. Sea does not include the area of jurisdiction of the San Francisco Bay Conservation and Development Commission, established pursuant to Title 7.2 (commencing with Section 66600) of the Government Code, including any river, stream, tributary, creek, or flood control or drainage channel flowing directly or indirectly into such area.

<u>Sea Cliff</u>: A vertical or very steep cliff or slope produced by wave erosion, situated at the seaward edge of the coast or the landward side of the wave-cut platform, and marking the inner limit of beach erosion.

<u>Sea Level</u>: The height of the ocean relative to land; tides, wind, atmospheric pressure changes, heating, cooling, and other factors cause sea-level changes.

<u>Seas (Waves)</u>: Waves caused by wind at the place and time of observation. (see swell).

<u>Seawall</u>: A structure separating land and water areas, primarily designed to prevent erosion and other damage due to wave action. It is usually a vertical wood or concrete wall as opposed to a sloped revetment.

<u>Second Units</u>: Auxiliary residential units on a lot with an existing primary residential unit. Second units may lack full facilities, such as kitchens.

<u>Sediment</u>: Grains of soil, sand, or rock that have been transported from one location and deposited at another.

<u>Sediment Budget</u>: An account of the sand and sediment along a particular stretch of coast; the sources, sinks, rates of movement, or the supply and loss of sediment.

<u>Seiche</u>: A standing wave oscillation in an enclosed waterbody that continues (in a pendulum fashion) after the cessation of the originating force. Seiches can be caused by tidal action or an offshore seismic event.

<u>Sensitive Coastal Resource Areas</u>: Those identifiable and geographically bounded land and water areas within the coastal zone of vital interest and sensitivity. Sensitive coastal resource areas include the following:

- 1. Special marine and land habitat areas, wetlands, lagoons, and estuaries as mapped and designated in Part 4 of the coastal plan.
- 2. Areas possessing significant recreational value.
- 3. Highly scenic areas.
- 4. Archaeological sites referenced in the California Coastline and Recreation Plan or as designated by the State Historic Preservation Officer.
- 5. Special communities or neighborhoods that are significant visitor destination areas.
- 6. Areas that provide existing coastal housing or recreational opportunities for low- and moderate-income persons.
- 7. Areas where divisions of land could substantially impair or restrict coastal access.

<u>Sensitive Species</u>: Taxa that are biologically rare, very restricted in distribution, declining throughout their range, or have a critical, vulnerable stage in their life cycle that warrants monitoring.

<u>Shore</u>: Narrow strip of land in immediate contact with the sea, including the zone between high and low water. A shore of unconsolidated material is usually called a beach.

<u>Shore Mooring</u>: A mooring for small boats that is located in the nearshore perimeter of the Harbor and its islands, perpendicular to the shoreline. One end of the mooring line is attached to a point on or adjacent to the perimeter bulkhead, and the other end is attached to a mooring buoy located in the water, inside the pierhead line.

<u>Shore Protection</u>: Structures or sand placed at or on the shore to reduce or eliminate upland damage from wave action or flooding during storms.

<u>Shoreline</u>: Intersection of the ocean or sea with land; the line delineating the shoreline on National Ocean Service nautical charts and surveys approximates the mean low water line from the time the chart was prepared.

<u>Shoreline Armoring</u>: Protective structures such as vertical seawalls, revetments, riprap, revetments, and bulkheads built parallel to the shoreline for the purposes of protecting a structure or other upland property.

SLC: State Lands Commission

<u>Slough</u>: To erode the uppermost layer of soil, or to crumble and fall away from the face of a cliff.

<u>Special District</u>: Any public agency, other than a local government, formed pursuant to general law or special act for the local performance of governmental or proprietary functions within limited boundaries. Special district includes, but is not limited to, a county service area, a maintenance district or area, an improvement district or improvement zone, or any other zone or area, formed for the purpose of designating an area within which a property tax rate will be levied to pay for a service or improvement benefiting that area.

<u>Spit</u>: A small, naturally formed point of land or a narrow shoal projecting into a body of water from the shore.

<u>Storm Surge</u>: A rise above normal water level on the open coast due to the action of wind stress on the water surface. Storm surge resulting from a hurricane also includes the rise in level due to atmospheric pressure reduction as well as that due to wind stress.

<u>Stream</u>: A topographic feature that at least periodically conveys water through a bed or channel having banks. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation.

<u>Structure</u>: Includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

<u>Submarine Canyon</u>: A steep-sided underwater valley commonly crossing the continental shelf and slope.

<u>Submerged Lands</u>: Submerged lands shall be defined as lands which lie below the line of mean low tide (from California Code of Regulations, Section 13577; see Public Trust Lands).

<u>Substantial Damage</u>: Damage of any origin sustained by a structure whereby the cost of restoring the structure to the condition existing before damage would equal or exceed 50 percent of the market value before the damage occurred.

<u>Substantial Repair</u>: Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before such repair, reconstruction, or improvement. This term includes structures that have incurred "substantial damage" regardless of the actual repair work performed. For purposes of coastal development permitting, a substantial improvement to a structure qualifies the proposed development as new development.

<u>Subtidal</u>: Marine habitat that is permanently below the extreme low tide line.

<u>Summer Season</u>: Begins the day before the Memorial Day weekend and ends the day after the Labor Day weekend; alternatively, June 15th to September 15th.

<u>Surfgrass</u>: A type of marine flowering plant that forms meadows on rocky shorelines and shallow rocky subtidal reefs.

<u>Surf Zone</u>: Area between the outermost breaking waves and the limit of wave uprush.

SWRCB: State Water Resources Control Board.

<u>Talus</u>: A pile of rock debris at the base of a cliff.

<u>Tectonic</u>: Related to the earth's surface.

<u>Temporary Event</u>: An activity or use that constitutes development as defined in this LCP but which is an activity or function which is or will be of limited duration and involves the placement of non-permanent structures; and/or involves the use of sandy beach, parkland, filled tidelands, water, streets, or parking areas which are otherwise open and available for general public use.

<u>Terrace</u>: A gently sloping platform cut by wave action.

Terrestrial: Land-related.

<u>Tidal Epoch (National Tidal Datum Epoch)</u>: The specific 19-year period adopted by the National Ocean Service as the official time segment over which tide observations are taken and averaged to form tidal datums, such as Mean Lower Low Water. The 19-year period includes an 18.6 year astronomical cycle that accounts for all significant variations in the moon and sun that cause slowly varying changes in the

range of tides. A calendar day is 24 hours and a "tidal day" is approximately 24.84 hours. Due to the variation between calendar day and tidal day, it takes 19 years for these two time cycles to establish a repeatable pattern. Thus, if the moon is full today, then the moon will be full again on this day of the year 19 years from today. The present tidal epoch used is 1983 - 2001.

<u>Tidal Prism</u>: The total amount of water that flows into a harbor or estuary or out again with movement of the tide, excluding any freshwater flow.

<u>Tidal Range</u>: Difference between consecutive high and low (of higher high and lower low) waters. (see Tides).

<u>Tidal Wave</u>: Wave movement of the tides. Often improperly used for tsunamis (see Tsunami).

<u>Tide</u>: The periodic rising and falling of the water that results from gravitational attraction of the moon and sun, and other astronomical bodies, acting upon the rotating earth. The California coast has a mixed tidal occurrence, with two daily high tides of different elevations and two daily low tides, also of different elevations. Other tidal regimes are diurnal tides, with only one high and one low tide daily, and semidiurnal, with two high and two low tides daily, with comparatively little daily inequality between each high or each low tide level

<u>Tidelands</u>: Tidelands shall be defined as lands that are located between the lines of mean high tide and mean low tide (from California Code of Regulations, Section 13577; see Public Trust Lands).

TMDL (Total Maximum Daily Load): The maximum amount of a pollutant that can be discharged into a water body from all sources (point and non-point) and still maintain water quality standards. Under Clean Water Act section 303(d), TMDLs must be developed for all water bodies that do not meet water quality standards after application of technology-based controls. TMDL also refers to the written, quantitative analysis and plan for attaining and maintaining water quality standards in all seasons for a specific waterbody and pollutant.

<u>Treatment Works</u>: Has the same meaning as set forth in the Federal Water Pollution Control Act (33 U.S.C. 1251, et seq.) and any other federal act that amends or supplements the Federal Water Pollution Control Act.

<u>Tsunami</u>: A long period wave, or seismic sea wave, caused by an underwater disturbance such as a volcanic eruption or earthquake. Commonly misnamed a Tidal Wave.

<u>Turbidity</u>: A measure of the extent to which water is stirred up or disturbed, as by sediment; opaqueness due to suspended sediment.

<u>Turning Basin</u>: An area, often designated on nautical charts, connected to a channel that is large enough to allow vessels to maneuver or turn around.

<u>Undertow</u>: A seaward current near the bottom on a sloping inshore zone, caused by the return, under the action of gravity, of the water carried up on the shore by waves. Commonly misnamed a Rip Current.

<u>Upcoast</u>: In the United States usage, the coastal direction, generally trending toward the north, from which a current comes. Sediment will often deposit on the upcoast side of a jetty, groin, or headland, reducing the amount of sediment that is available for transport further downcoast.

<u>Updrift</u>: The direction opposite that of the predominant movement of littoral materials.

<u>USACOE</u>: U.S. Army Corps of Engineers.

USC: United States Code.

USFWS: United States Fish and Wildlife Service (also known as FWS).

<u>Vernal Pools</u>: Vernal pools are low depressions that typically are flooded and saturated above a hardpan or claypan for several weeks to a few months in the winter and spring.

<u>Vessel</u>: Watercraft, such as boats, ships, small craft, barges, etc. whether motorized, sail-powered or hand-powered, which are used or capable of being used as a means of transportation, recreation, safety/rescue, service or commerce on water. This includes all vessels of any size (other than models) homeported, launched/retrieved, or visiting in Newport Harbor, arriving by water or land, and registered or unregistered under state or federal requirements.

<u>Watershed</u>: The geographical area drained by a river and its connecting tributaries into a common source. A watershed may, and often does, cover a very large geographical region.

<u>Wave</u>: A ridge, deformation, or undulation of the surface of a liquid. On the ocean, most waves are generated by wind and are often referred to as wind waves.

<u>Wave Climate</u>: The range if wave parameters (Height, period and direction) characteristic of a coastal location.

Wave Height: The vertical distance from a wave trough to crest.

<u>Wave Length (Wavelength)</u>: The horizontal distance between successive crests or between successive troughs of waves.

<u>Wave Period</u>: The time for a wave crest to traverse a distance equal to one wavelength, which is the time for two successive wave crests to pass a fixed point.

<u>Wave Run-up</u>: The distance or extent that water from a breaking wave will extend up a beach or structure.

<u>Wave-cut Platform</u>: The near-horizontal plane cut by wave action into a bedrock formation at the shoreline.

<u>Wetland</u>: Land which may be covered periodically or permanently with shallow water and includes saltwater marshes, freshwater marshes, open or closed brackish water marshes, mudfiats, and fens. Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following attributes:

- 1. At least periodically, the land supports predominantly hydrophytes; or
- 2. The substrate is predominantly undrained hydric soil; or
- 3. The substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year.

<u>Wildlife Corridor</u>: The concept of habitat corridors addresses the linkage between large blocks of habitat that allow the safe movement of medium to large mammals from one habitat area to another. The definition of a corridor is varied but corridors may include such areas as greenbelts, refuge systems, underpasses, and biogeographic landbridges, for example.

<u>Windward</u>: The direction from which the wind is blowing.

Zoning Code: Title 20 of the City of Newport Beach Municipal Code, as amended.

Zostera marina: See eelgrass.